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Thus it will be seen that if man has passions which impel him to the destruction of man, if he be the only animal who, despising his natural means of attack and defence, has devised new means of destruction, he is also the only animal who has the desire, or the power, to relieve the sufferings of his fellow citizens, and in whom the co-existence of reason and benevolence attests a moral as well as an intellectual superiority.—GRAVES' CLINICAL MEDICINE.

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ADDRESS BY THE HON. WM. M. DICKSON, AT THE ANNUAL COMMENCEMENT OF THE MEDICAL COLLEGE OF OHIO, MARCH 1, 1869.

GENTLEMEN: It has been customary upon these occasions, for the President of the Board of Trustees to address a few words of congratulation and advice to the graduating class. Perhaps it is a custom that were better broken than observed; yet homilies and platitudes have their uses, and a kind word from your *Alma Mater* may make your separation the more agreeable.

The profession you have chosen opens to you a wide field of usefulness. More than either of the others, is it allied to, and connected with that which particularly marks the age in which we live.

The law can not, in our time, claim any particular preëminence over the past. It is a question whether we have made any real progress—whether, indeed, our law, as a system of remedial jurisprudence and a rule of property, equals that of the old Roman law. Nor in the domain of theology, have we any to equal the great names of the past. Even in metaphysics, modern speculations it is said are but chips knocked off the original granite rock of Plato.

In the department, however, of experimental science, our age is specially distinguished. In this, the ancients made comparatively little progress. Cicero writes that "the investigation of nature either

seeks after things which nobody can know, or after such things as nobody needs to know."

Now, to this department of knowledge, your profession is closely related. To it mainly, in certain branches, must our country look for the maintenance of its rank among the nations, in the generous rivalry of the developments of science. For example: Your profession involves a knowledge of chemistry and its kindred subjects, electricity, magnetism, &c. These introduce you to investigations, in which the greatest results have been reached, and the end is yet afar off. Almost while we are speaking, in the wonderful revelations of the spectroscope, we have a striking illustration of the kinship and inter-dependence of the sciences. With the vapors of chemistry and the spectrum of optics are revealed the constituent elements of the heavenly bodies; and thus the boundaries of astronomical science are enlarged. Nor have these discoveries been a thing of chance, but the result of intelligent, well directed effort.

By a happy coincidence, the investigations of the Frenchman, Janssen, made in India, and those of the Englishman, Lockyer, made in England, were crowned with success at about the same time, each independently making the same discovery—the nature of the red flames of the solar eclipse. Nor did the coincidence stop here. M. De La-Rue had scarcely finished the announcement of Lockyer's discovery to the French Academy, when French patriotism was gratified by the reception of Janssen's letter announcing his own independent discovery of the same thing.

To come more closely to your own profession. A French chemist discovers chloroform, and the inquiring genius of a Scotch physician utilizes it in the discovery of its anæsthetic properties. Thus one discovery prepares the way and leads to another. This fact is also illustrated in the progressive discoveries in electricity and magnetism, utilized in the invention of the telegraph.

Again. Your profession requires a knowledge of anatomy, physiology and zoology. These bring you into close connection with the inquiries now pressed with unwonted zeal and almost startling results in the departments of comparative anatomy, pre-historic archæology, biology, involving the questions of "the origin of species," and "man's place in nature." These inquiries relate to the most hidden things in nature, yet of surpassing interest. For "to search out the whence and whither of existence, is an unquenchable instinct of the human mind." But I will not detain you longer on these matters.

Enough, perhaps more than enough, has been given to show you the intimate connection between your profession and the experimental sciences, the study of it leading to a knowledge of these, even when apparently far removed from it. Indeed, growth in medicine is, in great measure, dependent upon the growth of these sciences. There is not a discovery in chemistry, optics, electricity, magnetism, &c., that does not minister immediately or mediately to medicine. Science, the production of reason, is the natural enemy of charlatanry as well as superstition. With its advancement these must disappear. Beneath its white and gladsome light, they, twin offspring of ignorance, can not live. Medicine itself is a science, founded, like the other physical sciences, upon observation and induction. It is as erroneous as it is degrading to it, to suppose that it is a mere collection of nostrums or specifics, to be learned by rote by the student.

Nor is it to be narrowed down and circumscribed by any exclusive dogma. Water-cure, botanic remedies, infinitesimal doses, any special system, neither separately nor collectively constitute the philosophy or the entire remedial agencies of medicine. It is no Procrustean bed for the diversified forms of humanity and of human ailment. It is catholic in its nature, seeking knowledge wherever it may be obtained, and subjecting all science to its demands. It is the science of human nature, having for its end the "prevention of disease, the cure of disease and the improvement of the condition of man."

You will readily understand that mastery in it can only be reached through years of patient, devoted effort, guided by the spirit of scientific inquiry. Yet it invites to no unrequited toil; the rewards of science are among the greatest that wait upon human endeavor. I know under our democratic polity we are all necessarily more or less politicians; and hence, political success has had an undue preëminence. Yet who would prefer the pomp and circumstance of great office, to the pleasure and the fame of the student of the closet whose years of patient toil have at last been rewarded by the discovery of some great law of nature, or by an invention utilizing these laws to the benefit of mankind?

The Greek word *eureka* is domesticated in every language, because it is inseparably connected with an incident that touches the heart. Who does not sympathize with the philosopher of Syracuse, upon the solution of his problem, rushing from his bath crying, "*Eureka! eureka!*" "I have found it! I have found it!" Who does not sympathize with our own Franklin, when, having brought down the lightning from heaven,

thus establishing its identity with electricity, he tells us that he then felt that he was ready to die?

Agassiz has said that the name of our late lamented townsman, Prof. Mitchell, would live longer than that of the most distinguished politician—referring to his invention for sidereal observation.

Still, the universal stimulus with expectant parents is, "My son, you may be President," as if that were the acme of all greatness.

Yet, how many Presidents have left office with a reputation that any one would envy? And as to fame, with the flow of time and the brevity of their terms, the historian will soon cease to mark the order of events by a reference to their names. These will pass into tabular lists, and like the tables of Rome, sink into the forgotten rubbish of the past. A few, from their connection with great events, will escape this fate. But the names of science, associated with the discoveries and inventions, marking the developments of knowledge, will be as enduring as knowledge itself. When the blood ceases to circulate, and the hideous variola is no more, and pain shall have ended, the names of Harvey, Jenner, Morton and Simpson may pass from memory.

These are the benefactors of man. No fields of mangled victims, no ruined country, no mourning friends, no stricken revengeful foe attend the conquests of science. Nature joyously yields her treasures as the refreshing fountain flowed from the smitten rock.

I would not depreciate political eminence, but I feel that the disposition to seek office is wasting in our country talent and genius that might in the departments of science, be an ornament to our race. So that he is a public benefactor who leads one ingenuous, inquiring youth from the slough of office-seeking to science.

I would that you should devote yourselves to the noble profession you have chosen, with all its great opportunities for usefulness and fame. You are quite aware that the diplomas you have this day received, are not testimonials that you have finished your education. Indeed, they but indicate that you are now fairly prepared to begin your professional studies; and if you have learned how to study your profession, you have done well, and your teachers also.

It is not a difficult thing to commit to memory the teachings of a text book. But this alone is not sufficient. We must bring to the study of any subject we would master, a spirit of scepticism and criticism. Prove all things, hold fast that which is true. We are apt to take as truth that which our text books and teachers tell us, and quite

likely they are right; but knowledge obtained in this way does not become our own; it sits uneasily, as a garment made for another.

It only becomes our own when we have gone through for ourselves the process by which the original investigator reached his results, and have supplemented this by such independent modes of investigation and reflection as may occur to us. This manner of study, uniting with reading, well directed observation and reflection, gives knowledge and discipline of mind, securing soundness of judgment. These lead to wisdom, the true end of all education.

A credulous person of retentive memory and industrious habits, may fill his mind as a store-house, with facts, yet, without his own reflection there is no wisdom. There are men of much learning and little wisdom; and there are men of much wisdom, yet with little learning.

And this is well understood. We have in public life men of great and varied erudition, who pour it forth on every occasion in copious streams. People are startled and wonder, but in hours of trial, they do not look to them for guidance. They instinctively feel that wisdom is not here. There is a maxim, "beware of the man with one book"—that is, much reflection with little reading is better than much reading without reflection.

Do not mistake me, I am not underrating the importance of learning; but I would increase its value by adding that reflection and study which may make it our own.

While the investigator of science should doubt and criticise, let him not carry this unnecessarily into the domain of theology. There are men of science, of merit, who are continually contrasting their discoveries with the teachings of revelation. These commit the same error which theology did when the church invaded the province of science and commanded the earth to cease it revolution around the sun. "It moves, notwithstanding," said Gallieo.

Dr. Hooker advises: "Let each pursue the search for truth—the archæologist into the physical, the religious teacher into the spiritual history and condition of mankind." Enlarging upon this, I may add, let the scientific inquirer pursue his investigations after the methods of science, let the theologian pursue his studies in his own way. Each may be equal to his own, but not to both departments. There need be no apprehension of conflict if each reaches truth, for there is no discordance in the work of the Author of all harmony.

It may be inferred from what has been said, that while you should

endeavor to have a general, and, as far as may be, an accurate knowledge of all the branches of your profession—yet that you are more likely to reach high excellence if you make some particular branch, to the investigation of which your tastes, aptitudes and opportunities lead, the subject of your special inquiry. It is in this way that men of the old world study, and hence their great attainments. We, led by the multitude of matters, which, in a new country, demand our attention, spread ourselves over too much surface and dissipate our energies. Life is too short to permit any one, however great his capacity, to attain to a complete mastery of all science; yet, every one that pretends to scholarship, owes it to himself and to his fellow-man to so master some one branch of knowledge that he will be upon it an acknowledged authority. If each who can, does this, selecting different branches in the aggregate, the public will have the advantage of ripe scholarship in all the departments of knowledge.

You will observe, gentlemen, that I have not referred specially to the practice of your profession. It is not because I do not feel the exceeding importance of this branch of your duties. It is owing partly to the fact that on this you have already had the better instruction of your teachers; partly to the fact that whatever is likely to promote the money-making part of your profession will not be overlooked; but mainly because I would fain stimulate in you the desire to elevate and advance your noble calling. I would that you should look upon it as something higher than a mere money-getting art. Yet, even in this narrow view, a thorough knowledge of the principles of medicine will not hurt you. For I take it, notwithstanding the depressing example of successful charlatanism, that, other things being equal, your capacity and success will depend upon the mastery you obtain over the science of medicine.

It is true that there have been instances in your profession, of high scientific capacity not coupled with practical skill; yet this has been owing, perhaps, to the fact that the practice was neglected, or perhaps to some peculiarity of mind or temperament unfitting for practice. But there are many noble examples of high scientific capacity united with the highest practical skill.

You will pardon me if I shall name a living one. Dr. Simpson, of Edinburgh, is perhaps at the head of his profession in his country, having an unequaled practice: yet he has illustrated the annals of medicine with many happy inventions and important discoveries; and perhaps there is scarcely a number of the leading medical journals in

the United Kingdom which has not a contribution from his unwearied and productive pen. I mention him the more readily because there is that in his career which appeals peculiarly to American youth.

There is not a young man before me who commences his professional life under difficulties greater than those which surrounded Prof. Simpson in his youth. Living in a country where the classification of society opposes serious barriers to the advancement of the young man without family or fortune, he yet, beginning life the son of a baker, by his indomitable energy and perseverance, has risen to his present high position.

Gentlemen, your *Alma Mater* and your country expect much from you. May they never be disappointed. Let it be your worthy ambition to be masters in the science of medicine; so study it as to make it your own. Select some branch suited to your tastes and opportunities, and make this the object of your special, life-long investigation; and then, with the blessing of heaven, your name, may yet be written among those who have advanced the boundaries of knowledge.

CASE OF DIPHTHERITIC CROUP—OPERATION—DEATH.

BY DR. J. C. REEVE, DAYTON, OHIO.

January 29th, 1869, was called to see a boy aged seven years, under the care of Dr. Searles, of Osborn, with whom had been associated Dr. Green of Fairfield. For about a week before, the patient had been suffering under the symptoms of an ordinary cold; only on the second day preceding had he became severely ill, and only since the day before had his breathing been seriously affected. I learned that on the day previous he had passed part of the time looking at his book, nothing apparently the matter with him, except what was betrayed by cough, breathing and voice. He had been rapidly getting worse, however; during the night he had three suffocative attacks, so severe that his friends did not think he could survive another. I found him to be an extremely healthy looking child, of a very healthy family, but now presenting all the symptoms of suffocation from laryngeal obstruction; his cough suppressed, voice whispering, chest walls working violently with the efforts to respire, face and hands livid, pulse frequent and tolerably feeble. Upon the tonsils and larynx were scattered

patches of false membrane; they were not extensive or thick, but sufficient to characterize the case as one of diphtheria. In the opinion of the gentlemen in attendance, he had pneumonia, or broncho-pneumonia of the left lung; but the noise of respiration in the trachea so interfered with an examination that I could not distinguish it. I satisfied myself there was no hepatization. The treatment need not be detailed; he had frequently inhaled the vapor of slacking lime.

As soon as preparations could be made, and the parents had, after candid statement of the risks and probabilities of the operation, consented, I proceeded to perform tracheotomy. He was slowly and carefully brought under the influence of chloroform, which somewhat deepened the lividity of his countenance, but did not affect the pulse. Hæmorrhage was abundant, and so obscured the parts that the trachea was opened with great difficulty. Some delay was also occasioned by one branch of the dilating forceps not being in the trachea, but between the muscles. During this time only partial relief was afforded by the artificial opening. Some blood found its way into the air-passages, and the appearance of the patient was very critical. The instrument being adjusted, however, the intruding blood was expelled, the patient rallied and soon began to mend. Having to send home for a tracheotomy tube, the forceps were allowed to remain in place, the handles being tied together and fixed down to the sternum by adhesive plaster. The opening was free, and respiration through it perfect, so that when the tube arrived I decided not to introduce it, but to allow the forceps to remain; especially as I believed the tube to be too small for a patient of his age. In half an hour after the operation, the patient was asleep, breathing easily and regularly, color good, and pulse, by the testimony of all, better than before. Arrangements were made to fill the air of the room with steam. He was ordered milk for nourishment, and ice was allowed freely. At three o'clock P. M. I left on the train for home six hours after the operation, he was still doing well, so well that I felt strong hopes of his recovery; but was bitterly disappointed the next morning to learn that he died fifteen hours after I left and twenty-one after the operation.

As to the cause of death I can not be sure; he seems to have begun to fail about one o'clock in the morning. In the opinion of Dr. Green, the membrane had extended to the trachea, and by its dislodgment suddenly interfered with respiration and caused death. The manner of his death corresponds with this view; but the relative part played

by the diphtheria or the pneumonia, in producing the fatal result, is not clear.

REMARKS.—This case demands publication, if only for the rarity of the operation in this section of the country. So far as I can learn, tracheotomy for disease, has been performed in this city or vicinity in but one other case within fifteen years. In that case the patient died under the operation. I have also known of but one or two other cases where the operation would probably have been beneficial.

As to the case being one in which the operation was justifiable and presented a fair prospect of success, there is not a question in my mind, nor is there with the other gentlemen in attendance. His age, and his unimpaired powers from the short duration of the disease, were strong arguments in favor of it. It was impossible, of course, to decide how much the depression of the pulse depended upon the asphysia or upon other conditions; but it certainly, in any case, was no contra-indication to an operation. Looking very carefully at the symptoms in every respect, and at his condition, the conviction was forced upon me that it was a fair case for tracheotomy, that he would certainly die without it, and that it was my duty to perform it.

By some it may, perhaps, be maintained that because it was *diphtheria* an operation should not have been performed; that in *croup* it may be resorted to, but that in a disease which is constitutional, the operation does not promise enough to justify it. Upon this point, the first necessary step would be to reconcile authorities and teachers as to the identity or non-identity of the two diseases. The membranes in both diseases are anatomically alike, and very high and very respectable authority can be cited in favor of the view that they are essentially the same disease. This doctrine is maintained by Hillier in his recent work on the Diseases of Children.*

Trousseau, while he admits that croup, as we understand the term—what he calls *croup d'emblee*—may occur, yet says that in the great majority of cases the membranous formation begins in the pharynx and extends from there to the larynx. Bretonneau held this doctrine, and Guersant adopted it after having held the other and more generally received view of the British school.

But whether the pathological unity of these diseases be established, admitted or denied, there should be practically no question in reference to an operation. Whenever the danger depends more upon the local than the general disease, the operation should be performed. The

*American Edition, page 141, and *American Journal Medical Sciences*, January, 1869.

case is well stated by Trousseau, an authority upon everything relating to the subject second to no other in the world, and I translate what he he says in regard to the probability of success of the operation:*

"It has a chance of success *when the local lesion, when the croup, constitutes the principal danger to the patient.*

"This restriction is important; for if the diphtheritic infection has profoundly affected the economy; if the skin, the nasal fossæ are attacked by the pecial inflammation; if the frequency of the pulse, the delirium, the prostration indicate a profound intoxication; if, in a word, you have a case of malignant diphtheria, where the peril is rather in the general condition than in the local lesion of the larynx or the trachea, *the operation should not be attempted*—it is invariably followed by death."

Thus, in contrast to the case under consideration, was one of about the same age treated this winter. Thick diphtheritic patches on the throat, were followed by well-marked symptoms of their extension to the larynx; but the general state of the patient was such that the question of an operation was not entertained for a moment; she was pale and strikingly anæmic, her pulse like a mere thread, and extreme depression marked upon every feature. She recovered, however, and is the only case I ever saw recover of laryngeal affection in diphtheria. The treatment was with tr. ferri mur., chlorate of potash, quinia and alcoholic stimulants with inhalation of the steam of slacking lime, and lime water and solution of tannin, alternately in vapor from the steam atomiser.

In giving authorities in favor of tracheotomy in diphtheritic laryngitis, I must not omit Dr. Jacobi of New York. In a recent article upon croup, which, in my humble opinion, is one of the best contributions ever made to the medical journal literature of this country, he acknowledges no contra-indication to the operation, if the patient be suffocating:†

"Now, while I admit that with symptoms of general diphtheria, complicating a case of laryngeal diphtheritis, called membranous croup, the prognosis of the operation becomes more doubtful, I lay stress on the very same fact, for the reason that even in such cases, the only indication for the operation rests in the local obstruction."

The same doctrine is taught by Guersant‡—marked evidence of general infection of the system lessens the chance of success.

"If there are false membranes in the nares, behind the ears where ulcerations

Clinique Medicale, tome I, page 451.

†*American Journal of Obstetrics*, May, 1868.

‡*Notices Sur la Chirurgie des Enfants*, Paris, 1864.

often exist; if the sub-maxillary ganglia are enlarged, and if the urine is albuminous, the operator should know that there is very little or no hope of success."

A debilitating course of treatment—"low diet, antimonials, leeches and blisters"—lessen the chances of the operation; but extension of the false membranes to the bronchiæ, are not for him, a contra-indication:

"We have seen patients spontaneously expel false membranes representing the cavity of the trachea and bronchial tubes, and recover without an operation, and others who have also thrown them up after tracheotomy, and also recover."

In a discussion of the operation by the Medical Faculty of the Hospitals of Paris,* M. Archambault recognized the existence of broncho-pneumonia as a complication exercising great influence upon the result of the operation. His remarks are of interest in reference to the case under our care:

"M. Archambault insisted upon broncho-pneumonia being among the gravest complications and one almost surely fatal if existing at the time of the operation or shortly afterwards. It is, he added, extremely difficult to recognize the physical signs during the asphyxial period of croup; it can be rather judged to be present, than diagnosticated, by the frequency of the pulse and respiratory movements, (140 and 40), while in cases where there is only croupal asphyxia, the frequency of pulse and respiration are much less."

Having begun with the simple intention of reporting a case, we have extended our remarks, perhaps, already too far, and will not, therefore, enter upon any statistical evidence to sustain the operation of tracheotomy in diphtheria. It might be doing good service to adduce it. True membranous croup occurs in this section so rarely, diphtheria with laryngeal affection and without too severe general symptoms for the operation, is but occasional anywhere, the situation is so painful for parents and trying for the medical man, that it would be well to have at hand the fair support which statistics will give to the measure. We must defer this task, however, to another time, and content ourselves with quoting here the noble words of Barthez:†

"If children, the subjects of bad croup, having reached the stage of confirmed asphyxia, and having no longer anything to expect of medicine, offer to the surgeon the chance of one recovery in ten, in twenty, or even less, I for one, have not the courage to refuse them."

Hillier, in his recent work on diseases of children, teaches the doctrine of operation whenever death is threatened from laryngeal obstruction.

*Archives Generales de Medecin, Juillet, 1868.

†Medical Times and Gazette, August 8, 1868.

We may all of us at least expect as good success as Nelaton; he saved his first case and then operated twenty-three times without a recovery!* The particulars of the cases are not given; but it is to be presumed that the French rule was followed, of operating under any and all circumstances.

Finally, in considering the propriety of an operation, the relief to suffering given by it should have due weight. This was answered in the case reported. It is a strong point, for of all the painful scenes a medical man is called upon to witness, few are more distressing than that of a strong and vigorous child suffocating from laryngeal obstruction. If only a quiet and peaceful death be attained by the operation, that can not be considered a trifling gain.

CORRELATION OF THE PHYSICAL AND VITAL FORCES.

BY JAS. F. HIBBERD, M. D., RICHMOND, IND.

On the 12th of October, 1868, the winter course of lectures in the Jefferson Medical College of Philadelphia, was opened by an inaugural address by J. Aitken Meigs, M. D., recently appointed to the chair of Institutes of Medicine and Medical Jurisprudence in that honored seat of learning.

Prof. Meigs takes for the theme of his address, the Correlation of the Physical and Vital forces, and after a somewhat elaborate review of the progress of science in this regard during the last one hundred years, apparently arrives at the conclusion that at the present day there is no man of eminence or ability who is not a convert to the doctrine of the correlation of physical and vital force. Possibly this was not the author's intention; but the reader is certainly led to this view of his labor. One would hope that the erudite and accomplished professor is not going to make of himself an addition to that not inconsiderable class of teachers in medicine, who having adopted a theory, bring forward abundantly of authority facts and arguments to sustain their views, without intimating that the opposite opinion has earnest and honest advocates to support it.

The status of scientific opinion in relation to vital force in the last half of the eighteenth century, is fixed by Prof. M., by citing the

*_Clinical Lectures on Surgery_, Philadelphia, 1855, page 54.

ideas promulgated at that time by John Hunter, in England, Humboldt, in Germany, and Bichat, in France, all of whom were earnest advocates of the doctrine that vital force is something *sui generis*, a special endowment of living things. He refers to many other eminent men, active and of authority, in the earlier part of the present century, who held the same views strongly, one of them declaring that in the whole range of medical literature there is not a single author of note who does not admit the existence of "a governing vital principle as a distinct entity, distinct from all other things in nature."

He then alludes to the work of Dr. S. L. Metcalfe, of Philadelphia, on "*Caloric*," published in 1843, as being the first complete treatise that clearly set out and maintained the doctrine of the unity of all force; vital phenomena being the product of one of its correlated phases.

Dr. Metcalfe's book did not meet with much recognition as an exponent of the truth of science. Indeed, Dr. Richardson spoke of the author as an "immortal heretic in science," and Dr. Carpenter characterized him as "an enthusiast and system maker, and declared that his views were very unphilosophical." Now, however, these two eminent London physiologists are among the most earnest advocates of the doctrine which they almost ridiculed a quarter of a century ago.

Prof. Meigs recounts the labors and recites the opinions of a host of the leading medical men of to-day, who in various ways illustrate the correctness of the idea of a unity of force. After informing us that recently "Wurtz announced that he had effected the synthesis of neurine; while Kolbe, at a late meeting of the chemical society, stated that he had obtained urea from carbonate of ammonia," Prof. M. continues: "It is highly probable, indeed, that the time will come when all the products of living organisms will be created or closely imitated by the chemist. The complete realization of this probability will shortly tend to deprive nutrition or assimilation of its mysterious vitalistic character, and bring it, in common with other organic or vegetable functions, within the pale of physico-chemical actions." He then quotes from Dr. Gull, the great practical physician of London, and a profound thinker, this sentence: "Daily advances in science make it more and more probable that organized beings are the necessary development of the physical condition of our globe." Other distinguished scientists are cited to the same general tenor.

The microscope, by its revelations, has revolutionized many of the histological notions that were very confidently taught thirty years ago.

The most important point, for our present purpose, that it has revealed, is the fact, now accorded such by all classes of biologists, that the cell is the unit of vital activity in all organic existences. The theory of cyto-genesis, in the animal kingdom, is in its infancy yet; but it is a vigorous and a popular infant, recognized by all wise men as the coming giant in biological science, its growth assured and its development rapidly promoted, by the fostering attention of such untiring and zealous scientific wet-nurses as "Remak, Virchow, Weber, Redfern, His, Bottcher, Billroth, Paget, Beale, Max Schultze, Robin and many others."

According to Prof. Meigs, the physico-vital correlation of force is as much an established fact as the cyto-genesis of tissues, and as fully accepted by biologists. He calls it he "highway of research leading to the true theory of life," and tells us that among the great men who are radiating this highway with their intellectual light, are to be found Vanuxem, Metcalfe, Grove, Carpenter, Faraday, Mayer, Radcliffe, Hinton, Leconte, Vierordt, Donders, Fick and Wislicenus, Ranke, Tyndall, Frankland, Lawes and Gilbert, Parkes, Odling, the Rev. Dr. Haughton, Bence Jones, &c.

The careful reader will notice that this last catalogue of names, long as it is, omits all mention of one of the most industrious, painstaking, and candid microscopists in the world, an English biologist whose enviable reputation extends throughout the borders of civilization, a penetrating observer and a profound reasoner, who quarrels with no one, but gives the results of his labors with a clearness and perspicacity that others might follow with advantage; we mean Dr. Lionel S. Beale, of London.

Beale, in his work "on the structure and growth of tissues, and on life," devotes the last chapter to a consideration of Life in the light of the histological facts presented in the preceding part of the book. He had already shown that the cell consists essentially of two parts, the "*germinal matter*" and the "*formed material;*" of these, the latter exists exteriorly and the former centrally. The pabulum for the nutrition of the cell is received into the center of the germinal matter, and there begins its outward course, and as it progresses, undergoing the metamorphsis into the living structure of the cell, so that by the time it has reached the limit of the germinal matter it has become formed material, and is no longer subject to vital processes carried on in the cell. Now, according to Beale, when this unorganized pabulum reaches the center of the germinal matter and begins its out-

ward progress, its transformation is accomplished by a force having no unison with any conceivable plan of physical force; but on the contrary, it is acting in direct antagonism to all recognized laws of that force.

There is nothing in Ascherson's observations of the oil globules taking a coating of albumen—nothing in the "progressive physical changes which take place in the chyle as it passes onwards through the lacteals into the thoracic duct"—nothing in Prof. Bennett's lecture on the "Origin of Infusoria," that satisfactorily accounts for the phenomena that Beale asserts are accomplished only by a vital force, a force unlike anything else in nature, and he claims that it is a special endowment of living matter conferred on it by the great Author of the universe.

Quite possibly Beale may be mistaken, and in a little while some lynx-eyed philosopher may penetrate the mystery of interior cell action and show us clearly enough that it is but a peculiar modification of common physical force, so ordered by the Creator for the construction of organized living tissues; and when this is done, no man will be more ready to say it is done than Beale. But until we attain to such knowledge, it must be regarded as something in the nature of a sin of omission in even so good a man as Prof. Meigs, when he, summing up the status of the scientific world upon the point, in an inaugural address to a house full of students and others, conveys the idea that there is no one of meritorious eminence who does not yield credence to the theory that sun force and vital force are correlated—are but phases of the same power that floats the æronaut through the air—that holds the ocean in its bed in the diurnal whirl of the earth—that forces the melted viscera of the earth up through the volcano's crater, and that sends our thoughts through the wires bounding over the continent, or shooting beneath the deep sea from hemisphere to hemisphere.

A CHILD BORN WITHOUT CALVARIA OR ENCEPHALON.

BY DR. C. H. SMITH, KIRKLIN, IND.

July 27th, 1867, was called to see Mrs. H——, aged thirty years—German—vito-motor temperament—finely developed—mother of three living children.

On arrival, found she had given birth to a healthy male child which was separated and given to the nurse, and within twenty minutes more a female, breech presenting, was delivered still-born and without cranium or brain.

Some ten minutes were taken up in attentions to the patient, and removing placenta, which was double, when the monstrosity was more closely observed.

The parietal bones were entirely absent. The occipital and frontal were absent, except the inferior part of the former and orbital plates of the latter. The superior part of the temporal bones was also wanting. The eyes were quite prominent, but the optic nerves dwindled to a shred before decussating. A thin, transparent membrane stretched loosely across the base of the skull, beneath which was a small amount of pulpy substance, and serous fluid tinged with red. The medulla spinalis terminated in a soft, roundish mass. Development otherwise normal and child of medium size.

Up to this time, no signs of life had been manifested, neither heart sounds nor respiratory gasp; but on touching the superior termination of the medulla spinalis, convulsive movements of the limbs followed repeatedly, but no reflex action could be elicited by irritating the peripheries.

Parturition was natural, except an excessive amount of liqnor amnii with second birth. Neither was there any occurrence during gestation that would likely have influenced development. In October, 1865, patient had typhoid fever, and in December following, empyema, from both of which she had made an excellent recovery. It might be well to state that the husband was a very intelligent and healthy farmer. We leave the subject without comment.

ON LITHOTOMY OF THE GALL-BLADDER.

BY GEO. C. BLACKMAN, M. D.,
Professor of Surgery in the Medical College of Ohio; Surgeon to the Samaritan Hospital, Cincinnati, Ohio; etc., etc.

Continued from page 87, February number.

Mr. Samuel Sharpe, who was surgeon to Guy's Hospital, in his *Critical Enquiry into the Present State of Surgery*, London, 1750, at page 222, thus remarks: "I have hinted that though the opening of the

gall-bladder is exceedingly dangerous, where it remains loose, yet when it happens to adhere to the peritoneum, the operation may be advisable. The gall-bladder, like the urinary-bladder, by excessive distension is sometimes burst; but if previous to the rupture, it adheres to the neighboring parts with which it falls into contact, as is usual with inflamed membranes, it will be proper to make an incision in the upper part, lest it should burst into a part that should evacuate the bile into the abdomen. There are several examples recorded where it has broke externally, and the patients by this accident have done well. These examples, therefore, show the fitness of making such an opening, where an adhesion is certain; but what recommends an operation still more, is the possibility of extracting a stone or stones from the gall-bladder, which by their residence, would continue to keep up the inflammation and the consequential complaints. This operation was first performed where it was not originally intended, the surgeon only proposing to cure by dilatation a small fistula of the gall-bladder; but in examining the cavity with his probe, he felt a stone as large as a pigeon's egg, which he extracted, and the patient recovered. It is true, this operation is not yet established; but besides the case here recited, there are several histories of patients whose gall-bladders have burst externally, and whose stones have worked out of themselves, which ought to encourage a skillful surgeon always to examine if there are any stones in the gall-bladder, whether the opening into it be made by nature or art."

Wm. Bromfield, Surgeon to Her Majesty, and to St. George's Hospital, in his *Chirurgical Observations and Cases*, published in London, 1773, volume ii, page 174, speaking of distended gall-bladders, adds: "The tumor in this part has often been mistaken for an abscess of the liver, which at length bursting, has given credit to the person who attended the case; for by dilating the orifice, some biliary calculi have been discovered, which were then extracted with great solemnity, as if the whole operation was done in consequence of the superior skill of the operator. The same thing has happened in abscesses of the kidneys from the same cause; and authors very gravely describe the operation of nephrotomy, as if an able anatomist, once convinced of a stone being generated in the kidneys, and too large to pass into the ureter, would judge it might be taken out as safely as from the bladder. Surely this want of candor is unpardonable, as the credit, if any, is certainly due to chance; but relying on the reputation of the relator, a young rash practitioner may think the authority sufficient

for him to make the attempt. I am afraid some of my brother authors are rather too fond of relating cases of the marvelous kind, attended with success, without mentioning those which miscarried. The integrity of Hippocrates has done more service to physicians, in setting down the practice when unsuccessful, as well as where the patients recovered, than if he had put down twenty times the number that did well, and omitted those that died under his care."

Delpech, in his *Précis Elémentaire des Maladies reputées Chirurgicale*, Paris, 1816, *tome* ii, page 189, thus comments upon the operations which have been proposed for the removal of biliary calculi: "After the spontaneous or artificial opening of tumors formed by distended gall-bladders, it has often happened that biliary concretions have been found and easily extracted. This has been followed by an abundant escape of bile, which these foreign bodies had caused to be retained, and in some instances the patients have been cured. From this it has been inferred that when biliary tumors have terminated in such openings, a grooved sound might be introduced and calculi detected, as well as removed by enlarging the opening. But very few cases have been brought forward to prove that biliary concretions have been extracted from the gall-bladder itself. Judging from observation, it would seem that almost always these bodies have been removed from the thickness of the abdominal walls, where they had become engaged, and often they have been found in a sinus in the abdominal muscles, or beneath the integuments, which sinus has been caused by the infiltration of bile in the cellular tissue. If it must be admitted that, in certain cases, these concretions had been formed in the gall-bladder, and were afterwards thrown towards the surface by the process of suppuration, we are led also by analogy, to believe that under certain circumstances these biliary concretions have been formed in the sinuses in which they were found. It is an important rule, taught by experience, that we must not touch biliary tumors except where there has been evidence of external inflammation which has led to adhesions of the abdominal walls and the surface of the gall-bladder. But even then, how can we be assured that in carrying the knife to this or that point of the circumference of the abdominal ulceration or opening, we may not pass beyond the limits of adhesion, and give rise to infiltration of bile in the peritoneal cavity with all its dreaded consequences? In cases where the opening has been of long standing, and has become fistulous from the escape of bile, there may be less difficulty and danger from the proceeding. Cases have been observed in which the ad-

hesions between the gall-bladder and the walls of the abdomen have resembled an elongated ligament. Into this cord-like substance, which may be compared to a vessel—a narrow sinus existing—a sound penetrates only with difficulty, showing on the one hand an external orifice, while the other end communicates with the gall-bladder, the cavity of the latter containing several biliary concretions, which are not free, but closely embraced by the walls of the gall-bladder. It is evident that in such a case, the facility with which the gall-bladder has emptied itself of the bile deposited in its cavity, has permitted it to contract closely upon the concretions which it contains, and hence the formation of the pouches in which they have been found. It is evident, also, that however limited may be our incision through the coats of the cord-like sinus, bile may escape into the abdominal cavity. Finally, it is very doubtful whether, even if we should penetrate safely into the cavity of the gall-bladder, we could seize and extract the calculi there deposited."

Delpech then lays down the following precepts:

The immediate removal of biliary concretions by means of the knife, should be attempted only in those cases where they present themselves at the external opening in the abdominal walls, or are engaged in the sinuses connected with this opening. In no case should such operation be attempted where they are still enclosed in the gall-bladder. Dilating instruments, incapable of destroying the walls of the sinus, are the only means by which an attempt should be made to reach calculi in the gall-bladder, especially if the biliary tumor has long been open.

M. Cruveilhier, in his *Traité D'Anatomie Pathologique Générale*, Paris. 1852, *tome deuxieme*, page 570, reports the following case which occurred in the practice of M. Robert, then surgeon to the Hôpital Beaujon: "In 1836, a female, æt 35, was admitted with an umbilical fistula of eight months duration. It was the result of an abscess which spontaneously opened, giving issue to a yellowish pus. A sound detected a calculus at the bottom, which M. Robert deemed to be about the size of a hazel-nut. He thought that by breaking it into fragments with the crushing forceps, it might be the more readily extracted; but the simple introduction of the dressing forceps into the fistula for the purpose of exploration, gave rise to a peritonitis which destroyed the patient. The fistula, being opened at the umbilicus, followed the course of the suspensory ligament of the liver, and terminated in the gall-bladder which was extensively ulcerated. Here was

found a biliary calculus the size of a peach stone, which was just within the fistula, the walls of which presented considerable resistance."

Chaissaignac, in his *Traité Pratique de la Suppuration, et du Drainage Chirurgical*, Paris, 1859, *tome* ii, at page 368–9, after referring to the cases quoted by Ploucquet, in which biliary calculi through an abscess have escaped spontaneously, remarks: When the abscess opens spontaneously, if the opening is too narrow, or too remote from its fundus, we should enlarge it by means of caustics, and especially the Vienna paste, and he adds that a cure of the biliary fistula generally takes place after the extraction of the calculi.

At a meeting of the Medical Society of London, October 17th, 1859, Mr. Thudicum read a paper *On the Pathology and Treatment of Gall-Stones.* From the report published in the *London Lancet*, October 22, of the same year, we extract the following: "After some remarks upon the dietary and hygienic rules to be observed by gall-bladder patients, the author suggested that in some appropriate cases, an operation for the removal of gall-stones through the abdominal walls, should become a subject of consideration for surgeons. Dr. Richardson having alluded to the effects of loss of bile by a biliary fistula in animals, which he thought was contra-indicating the proposed operation, referred to points of diagnosis. The President (Mr. Hilton) remarked upon the operation which the author had hinted at, and thought there were many difficulties in its way. He should like to hear from physicians, the number, nature and prospects of such cases in which the operation for extracting gall-stones could be thought of. The operation would be impossible in cases where the calculus was closely embraced by the bladder. But, from his knowledge, he thought it not impossible that cases fit for operative relief might present themselves; and in cases of distended gall-bladder, (which might occur with calculi), an operation, such as the author had mentioned, had actually been performed with success."

Mr. Thudicum, in his excellent *Treatise on Gall-Stones*, London, 1863, page 45, says that Petit's plan was adopted in Germany by A. G. Richter, and that the latter in his work on Surgery, gives an excellent description of biliary fistulæ and their treatment, and of enlargements of the gall-bladder from calculi, and their treatment by surgical operations. He adds: "The essays of Petit and Richter must be carefully perused in order to see that the propositions of their authors were by no means so chimerical as subsequent writers have endeavored to make out." At page 251, Mr. T. refers to a case in which,

according to Schurigius (*Lithologia*, page 268), J. Fabricius removed two biliary concretions from a living man by means of cutting. At page 253, he mentions the case of Lespine, in which the abscess was opened with the knife, and the calculus reached.

Mr. Thudicum has copied from the London *Medical Times and Gazette*, May 10th, 1862, the report of a very interesting case, under the care of Dr. Cockle, at the Royal Free Hospital, in which a number of biliary calculi were discharged through a spontaneous opening about two inches below the umbilicus. This opening was about the size of a crow's quill, and from its orifice there was a constant oozing of nearly colorless mucus. A probe passed readily obliquely upwards when it came in contact with a solid body. After several ineffectual attempts to extract it with the dilating forceps constructed expressly for the purpose, Dr. Cockle was compelled to slit up the sinus as far as the stone, and then readily removed it. The wound quickly healed; but at the end of two or three weeks, the old symptoms returned and another calculus was detected about two inches distant from the outer orifice. "Mr. Hill again tried to dilate the sinus and grasp the stone, but after a few attempts, so much tenderness and purulent discharge followed, that it was not considered safe to interfere further at present. Recently, these signs have ceased, and the fistula has again relapsed into its former indolent state, contracting, and only discharging nearly colorless mucus. The patient has now returned to her ordinary occupation; but there can be no doubt that the sinus will again open from time to time, as many calculi are still in the gall-bladder." Dr. C. then refers to the case which we have already quoted in the practice of M. Robert, to show that fatal results may easily follow the attempt in some of these cases to dilate a sinus and extract the calculus.

In the *Gazette des Hopitaux*, Paris, March 24th, 1866, is a paper on the *Treatment of Biliary Tumor*, by M. Luton de Reims, who is also the author of the article *Biliaires* (*Voies*) in the *Nouv. Dict. de Med. et de Chirurgie Pratiques, tom.* 5th, Paris, 1866. In this he gives an analysis of the case reported in the *Bull. de la Soc. Anat.*, 1856, where Leclerc (*de Senlis*), in a female æt. 62, opened a fluctuating tumor in the right hypochondriac region by means of caustic potash, and from which at first a serous looking fluid escaped, followed by a large number of biliary calculi. The patient made a complete recovery. M. Luton adds that some two years before, Demarquay communicated to the *Societé de Chirurgie* the particulars of a case in which a man, æt. 35, had in the inferior part of the right hypochondrium a fistulous

opening succeeding to an abscess of the gall-bladder, and through which, from time to time, biliary calculi escaped. A careful examination showed that the fistulous passage and the gall-bladder were filled with concretions of the same nature. With the forceps, it was easy to remove those which were of small size and which occupied the vicinity of the external orifice of the fistula; but those of greater size could not be removed until they had been crushed with a small *brispierre*. The patient was restored to perfect health. From which he remarks that lithotrity, as well as lithotomy, may be applied to the treatment of biliary calculi. M. Luton states, in conclusion, that he has seen a patient who, after an attack of jaundice, had a biliary tumor which increased rapidly. An opening was made hy means of caustic potash, and in the course of a month, a few calculi escaped. Four months afterwards the fistula was still open, when the track was injected with iodine. Three years afterwards it was not closed, and yet the patient's health was good.

It is well known that cases have been reported of congenital absence of the gall-bladder, and yet no inconvenience seemed to have attended such defect. Whether the cases reported are sufficient to warrant the following statement by Matthew Baillie in his *Morbid Anatomy*, London, third edition, 1807, page 251, we do not pretend to determine. Under the head of *The Gall-Bladder Wanting*, he remarks: "The gall-bladder has also been known to be wanting, from a defect in the original formation. (See Dr. Sœmmering's Germ. Translat., page 150.) It has never occurred to me to see an example of this kind of monstrosity; but it may be the more readily believed sometimes to happen, as the gall-bladder does not serve any necessary purpose in the body. There are many classes of animals which are naturally without a gall-bladder."

According to Malgaigne, (*Traite d' Anatomie Chirurgicale et de Chirurgié Experimentale*, Paris, 1859, *tome* ii, page 363), Herlin and Campaignac have proposed either the extirpation or the ligature of the gall-bladder, both for the purpose of removing biliary calculi and preventing their return. Herlin advised the application of the ligature to the neck; but Campaignac to the gall-bladder itself. The former tried his experiment on a cat, which retained its appetite and all its functions unimpaired.

According to Malgaigne, Langlas and Duchainois extirpated the gall-bladder in three dogs, and they recovered. The well known fatality of wounds of the gall-bladder in the human subject, except where

adhesions had formed, is well understood, and their results lead no support to the heroic operation above proposed.

M. Luton in his article in the *Nouv. Dict. de Med. et de Chir.*, *tome* v, page 98, states that in cases of doubtful diagnosis we may venture to puncture with an exploring trocar, even when we have reason to believe that no adhesions have formed between the tumor and the abdominal parietes. He adds that this "petite operation" is devoid of danger, and that he has himself resorted to it in one instance without accident. He has also seen at the clinic of the Hotel Dieu of Reims, M. Thomas, by this means, detect the nature of a tumor in the right hypochondrium, which was formed by a distended gall-bladder, and in which the instrument struck a biliary calculus. This exploring trocar should not exceed one *millimetre* in diameter.

In conclusion, we will now present an analysis of the very interesting case reported by Dr. J. S. Bobbs, of Indianapolis, in the *Transactions of the Indiana State Medical Society* for 1868, pages 68–73. As will be seen from the report, the Doctor, with all the counsel called in, could form no accurate diagnosis, nor even an approach to it. It is stated that although the tumor had the position and appearance of ovarian, she was informed that its ovarian character was very doubtful; but it is not even hinted that it had any connection with the gall-bladder. We mention this, not in the spirit of criticism, but to show that the difficulties, until the cavity was laid open, were, in this respect, insurmountable. Even after the exploratory incision had been made, the embarrassment was sufficiently great to perplex the most experienced surgeon, and Dr. Bobbs is certainly to be congratulated on the fortunate termination of the operation and the subsequent progress of the case. Old Mr. Bromfield, from what we have quoted of his writings, would certainly have questioned the propriety of the heading given to Dr. Bobbs' report, viz: Lithotomy of the Gall-Bladder, and this, simply upon the ground that no such operation seems to have been contemplated when the removal of the tumor was commenced. But as this may, perhaps, after all, be regarded merely as a matter of taste, it can not detract from the skill displayed in the performance of this difficult, and in many respects, unique operation. With these few reflections, we now copy from the *Transactions* in the Doctor's own language, the most important details of the case:

"E. W., aged thirty years, requested my advice by request of Dr. Newcomer, for an enlargement in the right side. She is of spare habit, medium size, and nervous temperament. Has usually enjoyed pretty good, but never robust health.

About four years ago she observed an enlargement in the right iliac region, about the size of a hickory nut. Its position she represented to have been low down in the iliac region. There was no tenderness of the part. Her health at the time was bad, and continued so for several months. She had neuralgia of the stomach, and food and drink created much distress. This was produced by much exercise also, and usually lasted three or four hours. The enlargement continued to increase in size, and become tender after exercise, and ultimately disabled her from walking, or, as she expressed it, 'last winter (1867) she could not put her foot to the floor.' Since January, 1867, the enlargement has grown faster and given more trouble.

"Examination revealed a tumor just inside the right iliac bone, tender to pressure. Its outline could not be well made out, except on the right side, where its boundary was pretty distinctly defined. The course of the tumor could be traced on its lower border, while its inner margin, toward the spine, was less distinctly defined, and its upper limits still more obscurely marked. It admitted of a slight degree of motion from side to side and upward, but its movements left it uncertain whether the most prominent portion was the chief part of the enlargement, or only a projection from a deeper-seated growth. The walls of the abdomen were tense and slightly protuberant. The most careful examination, per vaginam and otherwise, disclosed no connection with the uterus or its appendages, although the limited motion in the parts did not demonstrate that no such connection existed. The uterus was tender, but did not seem to be enlarged, as it could not be felt above the pubis.

"So much obscurity surrounded the case that I requested further examination and consideration at some subsequent period, before attempting to diagnose the character of the tumor. This examination was made, but revealed nothing new, and tended to confirm the opinion partially arrived at on the previous occasion, that the enlargement had no connection with the uterine organs; but beyond this, nothing definite as to its character or connections could be made out. It had the position and appearance of ovarian tumor, and the patient so regarded it, from the opinion of other physicians whom she had consulted. She was informed that its ovarian character was very doubtful, and its true nature very uncertain, and that if it were the former I could give no assurance that it could be successfully removed. She, however, so persisted in the request that I should undertake its removal, that I finally consented to make the attempt, and on the 16th of June, 1867, assisted by Drs. Newcomer, Todd, Comingor, Mears, Avery, and a medical student, proceeded to do so.

"An exploratory incision was made between the umbilicus and pubis, the patient being under the influence of chloroform. The omentum was found to be thickened and adherent to the walls of the abdomen. It was separated by a finger, as far as this could reach, toward the right side, along the whole extent of the section—about four inches in length—in hopes of reaching some part where no adhesion existed. Failing in this, with two fingers of either hand the omentum was torn through over the tumor, so as to admit the finger which came upon the protuberant portion of it. Passing the finger around this, some adhesions were broken up, and the tumor traced upward. Other adhesions which it had formed

with the parts around it, were also discovered, and what seemed to be a smaller lobe in its upper part, but no pedicle or attachment could be felt. Enlarging the opening through the omentum, the tumor was plainly visible, but the orifice would not admit of its exit. The wound through the abdominal walls was carried an inch above the umbilicus on the right side, over the prominent part of the enlargement, which was made to pass through it. This was found to be oval in form, about five inches in length, and two inches in diameter at the widest part, tense, and evidently contained a pellucid fluid. No pedicle could be made out, and the sack showing its contents to be transparent, its lower margin was cut through, when a perfectly limpid fluid escaped, propelling with considerable force, several solid bodies about the size of ordinary rifle bullets. Introducing the finger, other solid bodies were felt, but not in the main sack. A number were hooked out with the finger, and varied in size from that of a mustard seed to that of a bullet. One of the latter size could be distinctly felt, but no communication between the space containing this and the main sack could be found, and it was not removed, being situated at the extreme end of the finger. The sack had the appearance, externally, of an hydatid, its walls were of the thickness of ordinary cuticle, smooth in its inner aspect, and were whitish and semi-pellucid. Pulling it downward, after being evacuated, brought into plain view the right lobe of the liver, to the lower surface of which it was attached by a broad linear base like the gall-bladder. The finger introduced into the sack detected what seemed to be smaller sacculi, opening into the main one.

"It had the appearance of an enlarged gall-bladder, or an appendage to this, although its size, the clear serous character of its contents, and the thickness and semi-transparency of its walls, might justify some degree of doubt upon this subject. From its form, attachments and solid accretions, one of which could be so distinctly felt in a diverticulum, but which I did not succeed in removing, seemed to mark its identity with the gall-bladder, and deterred me from the excision of the sack, as I should otherwise have done. I therefore put a stitch in the cut lips of its walls and cut the ends closely. This step was suggested by the apprehension that if any portion of its solid contents should have been overlooked, their escape into the cavity of the abdomen would be prevented, and the belief that the sack, in the event of its refilling with fluid, would become adherent to the walls of the abdomen, and be within the reach of a trochar, and make it practicable to obliterate it by injection, if it became necessary.

"It would have been gratifying to have determined the condition and relation of the parts more satisfactorily, but the adhesions existing, as the result of past peritoneal inflammation, rendered this impracticable, without increased hazard to the patient.

"The wound was closed by sutures and adhesive plaster, no vessel requiring to be ligated, and thirty drops of laudanum given after the patient was placed in bed.

"From the 22d, her recovery was progressive and requires no special remark. In about two weeks she was permitted to sit up, and in three weeks to move about her room, and in four to ride out.

"Careful examination of the solid concretions removed, leaves no doubt of their being biliary calculi. They are irregularly spherical in shape, smooth on the

surface, which is of a mahogany color, and polished. The interior is of a whitish yellow, striated and porous. They are of light specific gravity, and numbered some forty or fifty, the majority being of the size of small shot. When access to the enlargement was reached, the surrounding parts were so agglutinated by old adhesions as to prevent a satisfactory inspection of its deeper portion. After the sack was opened, more space was obtained, and its attachment to the under surface of the liver could be both seen and felt, and had the appearance of an hypertrophied gall-bladder. Its lower extremity projected about five inches from the free margin of the liver. The cystic duct was probably obliterated from irritation produced by these concretions, and the one felt at the extremity of the finger was probably lodged in one of the biliary ducts.

"Various authors have reported cases of hypertrophy of the gall-bladder, but I believe they have usually found traces of healthy or vitiated biliary matter in the fluids contained in the cysts. In this instance, the fluid was perfectly pellucid and watery, the solid and coloring matter having either been appropriated by the concretions, or had become absorbed or diffused."

Dr. Bobbs' case is not the only one in which the fluid found in the cyst has been "pellucid and watery." Thus, M. Luton in his article on *Biliaires (Voies) in the Nouveau Dictionnaire de Medecine et de Chirurgie*, pages 100–1, quotes the cases reported by Sonnié-Moret in the *Bull. de la Soc. Anat.;* by Barth and by Bourdon, in the same journal, 1840. The same Bulletin, &c., for 1847, contains also similar cases reported by Deville, and Lacaze-Duthiers. We have found several cases reported in which a biliary fistula was not productive of the serious consequences referred to by Dr. Richardson, when he opposed the operation approved by Dr. Thudicum in the discussion already noticed, and yet, after examining all that we have been able to find upon the subject, were we required to decide in reference to the propriety of the so-called lithotomy of the gall-bladder, we should unhesitatingly follow the suggestions of Boyer and Durand, viz: wait until the unmistakable evidences presented of adhesions between the tumor and the abdominal walls, indeed, until it assumed the appearance of an abscess about to open spontaneously, when the operation is sure to be one of the greatest simplicity, (*de la derniere simplicité.*) There is nothing in the special treatises of Bonnet, Budd, Frerich, or Thudicum, which could have enabled us, in a case like that reported by Dr. Bobbs, to have formed a positive diagnosis as to the real character of the tumor; and as the same doubt must exist in many of the cases which present themselves, we should feel disposed to restrict the operation to the cases in which adhesions have formed.

DR. COHNHEIM'S RESEARCHES ON INFLAMMATION AND SUPPURATION.

Translated from an article by Dr. WRANY, in the ninety-ninth volume of the *Prager Vierteljahrs-schrift*,

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The researches of Dr. Cohnheim (*Virch. Arch.*, xl, page 1) on inflammation and suppuration, have been attended with new and highly interesting results. He commenced his inquiries with the study of keratitis, which he produced artificially in frogs and rabbits, either by brushing the cornea with tincture of cantharides, or by cauterizing it with a stick of nitrate of silver, or by drawing a piece of thread transversely across the globe or the cornea. By all these methods, he obtained corresponding results, which differ, however, from the views generally received; for it has been held, since the investigations of His and Strube, that the changes taking place in inflammation of the cornea are confined to the stellate corpuscles of this structure, which become enlarged, and partly by direct division, partly by endogenous development, produce pus corpuscles. C., it is true, confirms the opinion that the dimness of the cornea depends on the presence of elements resembling lymph corpuscles—*i. e.*, pus corpuscles—and its degree upon their number, but he became convinced that the stellate corpuscles of the cornea are present, besides the pus corpuscles, in the same regular distribution and without any material deviation with regard to form and deportment, as in the normal transparent cornea. The stellate corpuscles do indeed exhibit, as long as the tissue has not perished, all the manifold forms which living pus corpuscles assume by virtue of their contractility; but the pus corpuscles, in consequence of their more considerable size, duller lustre and characteristic prolongations (offshoots), are easily distinguished from the latter. Moreover, the stellate corpuscles of the cornea retain their normal distribution, while, on the contrary, the arrangement of the pus cells is quite irregular, since many of them lie on the same plane with the former and may be seen scattered among them at the same focal distance, while others occupy the interspaces between the successive parellel layers of the corneal corpuscles, occasionally lying immediately over and partly concealing some of them. Sometimes they are found isolated, dispersed here and there in the tissue, or they are collected

in larger or smaller groups; but, as Recklinghausen has already shown of the lymph corpuscles of the normal cornea, all wander or change their place by virtue of their contractility. Thus, in the course of a few hours one may see a pus corpuscle gradually move onward, mount a stellate corpuscle, or recede from it; further, one may observe a small group disperse, so that a previously-concealed corneal corpuscle comes into full view; and again, a number of isolated pus cells are seen successively to unite to form a group, so as completely to hide from view a stellate element.

Although our author has become convinced that *the corneal corpuscles with their protrusions are preserved in their normal distribution, however great the number of pus corpuscles at any one place may be*, yet he does not wish to be understood that they are not sympathetically affected by the inflammatory process. Of course, this participation is only of a passive subordinate kind, limited, in very advanced keratitis, and particularly in the immediate vicinity of a highly inflamed spot, to the assumption, on the part of the stellate corpuscles, of a very granular aspect, retraction of their protrusions, and sometimes of the appearance of vacuoles in their protoplasma.

In the inquiry as to the origin of pus cells, it was now possible, in conformity with the observations described, possitively to exclude the stellate corpuscles of the cornea, and to take into consideration but two possible sources. Either the pus corpuscles had their origin in the pre-existing migratory lymph corpuscles, or they did not originate in the cornea at all, but had an external source. As to the first source, it may be objected, on the one hand, that the number and distribution of the wandering lymph corpuscles in the normal cornea vary so much that it is hardly possible to account for the constant and homogeneous course of inflammation by their increase, and, on the other hand, that nobody has really observed the process of cell-formation and cell-multiplication in lymph and pus corpuscles. The second possible source alone need, therefore, be considered, especially as the results of a systematic series of experiments on the course of traumatic keratitis point in this direction. C., namely, has come to the conclusion that simple traumatic keratitis—*i. e.*, the cloudiness produced thereby, always commences at the margin of the cornea and then gradually approaches the center. This observatiou rendered it improbable that the corpuscles, perchance immigrating into the cornea, could come from any other source than its outer periphery; nevertheless, C. submitted the possibility of an anterior or posterior entrance to an expe-

rimental investigation, adopting the method pursued by Recklinghausen for a similar purpose. Anilin blue, namely, was applied in one instance to the conjunctival sac, which was then closed by suture; in another experiment it was injected, by means of a Pravat's syringe, into the anterior chamber; but in neither experiment were corneal corpuscles with blue granules observed.

A third possible source, the entrance of the pus corpuscles from the sclerotica could forthwith be excluded, as the sclerotica of the frog consists of cartilage in which pus cells are never observed, neither in its normal nor pathological state. Under these circumstances, there were but two ways left by which the pus corpuscles might have advanced to the cornea, namely, the lymphatics and the blood vessels.

C. now injected anilin blue into a lymphatic vessel of a frog and observed in an artificial keratitis subsequently produced, that a part of the pus cells always contained granules of coloring matter, whilst the tissues of an animal treated in the same manner, and especially the cornea, presented no granules of coloring matter, either free or within the cells. But the circumstance that it made no difference as to the result, whether the anilin blue was injected into a lymphatic vessel of the head, back, lower limb, or abdomen, as long as the amount of fluid injected was considerable, rendered the direct transition of pus corpuscles from the lymphatics to the tissue of the cornea less probable, and suggested the idea that the blood vessels are the medium of their passage, particularly as Recklinghausen had already shown that corpuscular elements introduced into the lymphatics of the frog very readily enter into the blood vessels. Indeed, on the same day after injecting anilin blue into a lymphatic vessel, and still more on the following day, C. found blue granules in the blood, most of them situated within the colorless blood corpuscles. The direct injection of the coloring matter into the blood was now to decide whether the appearance of pus corpuscles with colored granules in the inflamed cornea was independent of the presence of colored granules in the white blood corpuscles, or connected to the latter as an intermediate step. The result of this experiment corresponds fully with that of the injection into the lymphatic vessels; in a short time a number of colorless blood corpuscles admitted colored granules into their interior; and whilst one never, even weeks after these injections, if they are carefully conducted, meets with colorless granules in the tissues, either free or in the interior of cells, in keratitis, on the contrary, no matter how produced, there immediately appears a more or less large number

of pus corpuscles, which are distinguishable by colored granules. From this it may be concluded *that some pus corpuscles in the inflamed cornea were formerly colorless blood corpuscles and that they have forced their way into the cornea from the blood vessels.* As to the modes in which the pus corpuscles move onward in the cornea, C. considers the doctrine of Recklinghausen, of nutrient canals in the connective tissues, as that best founded.

The investigation having arrived at this point, further researshes could not be pursued in a tissue having no vessels like the cornea; hence the field of observation had to be a vascular structure and therefore C. transferred it to the mesentery of frogs, firmly fixed, and made motionless with curare poison; but he also obtained the same results in subsequent experiments on rabbits and kittens. An inflammation is easily produced in the serous membrane by brushing with tincture cantharides, or by applying nitrate of silver; indeed, exposure of the intestine with the mesentery to the atmosphere, suffices for this purpose. Hyperemia is pretty rapidly developed, and in the course of several hours, a light cloudiness appears which gradually becomes dimmer and denser, so that the individual vessels become very indistinct. Finally, after fifteen, eighteen, or not until twenty-four hours, or even thirty-six hours, the intestine is wholly incrusted with a thin, soft, pale-grey, or greyish-yellow, somewhat adhesive layer which can be removed in smaller or larger shreds, and which consists entirely of closely crowded contractile pus corpuscles and isolated red blood corpuscles, all imbedded in an amorphous faintly granular material, which may be completely cleared with acetic acid. In short, peritonitis with fibrino-purulent exudation, has been developed. Before passing to the microscopical analysis of the details of the process, it would seem necessary to determine the normal conditions of the circulation. Respecting the current of the blood in the arteries, it is characterized by four peculiarities. *First*—By its direction, which, in the mesentery, is from the fixed point to the intestine. *Secondly*—By its extreme rapidity, which renders it impossible to distinguish a single corpuscle in the current of blood. *Thirdly*—By the presence of an axial current carrying all the red blood corpuscles, while the colorless plasma near the walls of the vessels here and there contains a white corpuscle. *Finally*—By the rythmical acceleration and retardation of the current of blood. In the veins, the direction of the circulation is the opposite of that of the arteries; the rapidity of the current is considerably less, hence, one is able faintly to distinguish the outlines of some of the

corpuscles; the stratum of plasma is narrow, and carries isolated colorless blood corpuscles in regular order, which slowly move onward, and occasionally stand still. Finally, the current is uniform and continuous. The circulation of the capillaries differs from both the arterial and venous. According to their capacity they permit two red blood corpuscles, or a red and a white one, to pass side by side, or admit but a single one, and they do not present a special axial stream. The current, as a general rule, is directed from the arteries to the veins, but frequently stagnates for a longer or shorter time in some branch or other, and may turn back at some points. The rapidity is, therefore, unequal, and always so inconsiderable that the individual corpuscles can easily be distinguished; besides, the colorless corpuscles always advance more slowly than the colored ones. In the capillaries, as is well known, there are no intimations whatever of pulsation. During the development of inflammation, the individual stages of the process exhibit a very changable duration, always, however, succeeding each other in a definite order in which they will be considered in the following pages. First of all, a *dilatation* of the arteries takes place without previous contraction. This constantly increases with, at furthest, but slight and short intermissions and remissions, and has generally arrived at its acme in one or two hours, at which it remains during the succeeding stages of the process. The extent of the dilatation may exceed two-fold the original diameter. At the same time the vessels become elongated, which is exhibited in pretty well marked sinuosities. Dilatation of the arteries is succeeded by a like condition in the veins, in which, though supervening much more slowly, it yet reaches and even exceeds double the amount of the original diameter. In these vessels, however, meanderings and sinuosities, as well as partial contractions and dilatations, are absent.

The dilatation of the vessels having continued one or two hours, a *diminution of the rapidity of the current* takes place without exception; the circumference of the individual corpuscles may now be readily distinguished; and the pulsation of the arteries becomes very evident; but the current has lost its axial character, and the arteries show unmistakably that the colorless corpuscles tend to the walls of the vessel. The deportment of the peripheral zone of the current of blood in the veins now becomes highly interesting, since here and under the eyes of the observer *the original stratum of plasma becomes filled with numberless colorless blood corpuscles* which, finally, adhere to the periphery of the vessel in a single wall-like layer within which the red

blood column floats onward with uniform rapidity. This condition does not continue long, however, before the eye of the observer is captivated by an unexpected event. On the external surface of the venous wall, there appear small bud-like isolated elevations, which slowly and gradually enlarge. After a while, there seems to rest on the exterior of the vessel, a hemisphere, about half the size of a white blood corpuscle which gradually assumes a pyriform shape, and, finally, protrudes from its periphery very delicate offshoots and processes which impart to the previously rounded contour a variety of forms The principal mass of this small body, the swollen indented end, recedes more and more from the surface of the vessel, whilst the narrow extremity elongates to a very fine pedicle. But ultimately, this pedicle separates from the wall of the vessel and we now observe a colorless, somewhat brilliant contractile corpuscle, with some short and a very long offshoot; this fully coincides in size, as well as in the possession of one or more nuclei, with the colorless elements of the blood. This process is repeated at many other points of the wall of the vessel, so that one may observe simultaneously all the stages which were successively displayed in the individual corpuscle. Within three or four hours after the appearance of the first elevation on the external surface of the vein, this latter is encircled by a simple, but dense layer of such corpuscles, and after the lapse of a few more hours, an immense swarm of them encloses the vessel. Moreover, the corpuscles situated in the outermost rows present shorter and shorter protrusions, so that, finally, nothing else is seen than the ever changing forms of contractile blood or pus corpuscles. During this gradual and gradually increasing *passage of colorless blood corpuscles from the interior of the vein through its unbroken wall*, the previously perfect condition of the blood-current remains unaltered; as before, the inner peripheral stratum presents a simple, uninterrupted layer of white blood corpuscles, within which the red blood discs glide onward in a continuous current. It is necessary to call attention to the fact that not a single red blood corpuscle is seen among the colorless corpuscles which have passed through the walls of the vessel. In order to avoid deception, C. also observed the whole process in other animals in which some of the white blood corpuscles had been impregnated with coloring matter by means of the proceeding already detailed, and found the correctness of his observations most clearly confirmed.

About the same time, when the arteries, and subsequently the veins,

become so much dilated, the capillaries also increase in volume; but their augmentation is only one-sixth, or at most, one-fourth of their diameter. Their current of blood exhibits, in regard to direction, rapidity and uniformity, the same variations as in the normal state. In some of the capillaries, the blood corpuscles move onward with unaltered rapidity, and uniformly in the same direction, and with the same regularity; in others, on the contrary, their movement is gradually more and more retarded, and, finally, ceases entirely for hours, so that the capillary seems to be crammed for longer or shorter distances with unmoved red and white blood corpuscles. Lastly, one may observe, particularly in the more capacious capillaries, a resting, and a moving stratum, and the first may occupy the whole of the periphery, or only one-half of the caliber with the corresponding half of the periphery. Moreover, we would specially note that the quiescent stratum does not only contain colorless corpuscles, but also red ones.

Corresponding fully with these inequalities, the subsequent events take place in various ways. In those capillaries whose blood-stream goes on continuously and with the same uniform rapidity, no kind of change supervenes. But wherever, on the contrary, partial or complete stagnation has become established, there a new state of things begins to be developed in a short time. The first thing observed at such places, is an alteration of form of the spherical colorless blood corpuscle, taking place more or less rapidly and completely, but always exhibiting the well known amœboid movements. Soon afterwards, a bud-like elevation, or a spinous protrusion, is observed on the external surface of the capillary wall at a point corresponding to the situation of a white corpuscle on its inner surface. This offshoot gradually increases in size, and is, finally, changed, just as was observed with the veins, into a colorless corpuscle which is now connected with the capillary wall only by a much elongated pedicle which is subsequently completely detached. During this often very protracted process, a state of things is frequently seen which is not obtained in the profile view of the large veins on account of the relative thickness of their walls, and which must banish every doubt as to the interpretation of the process—namely, a corpuscle situated partly within and partly without the capillary wall. But in the capillaries, not only the colorless blood corpuscles, as is the case with the veins, but also *the red discs pass through the wall to the exterior*. Views are now presented to the eye like those described by Stricker as existing in the amputated

tails of tadpoles, namely, red blood corpuscles are seen, one-half of whose bulk has already penetrated through the wall of the vessel, while the part containing the nucleus is still within the capillary, and connected with the external portion by a narrow neck which is encircled by the capillary wall. Generally the inner half follows the outer portion in the course of a few hours; but if the current of blood is reëstablished during the process, the red blood corpuscles rolling by communicate an oscillatory motion to the inner half which may, even, with a gradual return of the current, be separated and floated away from the external portion which preserves the most undisturbed rest. Thus it happens that twelve, eighteen, twenty-four hours after exposure of the mesentery, a large number of capillaries are encircled by dense rings of corpuscular elements, consisting mostly of colorless contractile blood corpusles, and measurably of red blood corpuscles, the latter presenting ordinary, uninjured, nucleated blood discs, and smaller shperical or elliptical, apparently homogeneous bodies without a nucleus, the remains undoubtedly of the red blood corpuscles mutilated in the manner described.

C. now discusses the question, *how it happens that the colorless blood corpuscles accumulate in the marginal layer of the veins*, and calls attention to their movements in the liquor sanguinis under normal conditions, in explaining which, he adopts the views of Donders. According to this opinion, as the rapidity of the current increases towards the axis of the vessel, that half of the spherical colorless blood corpuscles which is nearest the axis is impelled by a more rapid current than that half which is turned away from it. The corpuscle, is therefore, not only urged on in the direction of the current, but also turned round its own axis, and under this combined influence, it is at last forced towards the periphery of the vessel. On the contrary, the flattened form of the red blood corpuscles whose long diameter advances parallel with the axis of the vessel, permits but a small portion of their border to be infringed upon by the current, and hence rotation does not occur. If now the rapidity of the current is diminished in consequence of dilatation of the vessel, this change must be most apparent in the peripheral stratum where the current is slowest in the normal state; and hence the colorless corpuscles which were before impelled in short and protracted movements, may now become wholly quiescent. But as every fresh quantity of blood conveys more white corpuscles, these must ultimately fill the whole domain of the peripheral part of the dilated veins.

C. endeavors, further, to answer the question, *By what mode and by what power the blood corpuscles pass through the walls of the vessels into the surrounding tissues?* Respecting the first part of this question, one is forced *a priori* to the admission that the blood discs advance only by pre-formed ways penetrating through canal-like spaces in the walls of the vessel, as it is not possible that they can perforate a solid unbroken wall. As the principal part of the walls of the vessels consists of connective tissue, and the possibility of movement of the lymph corpuscles in this tissue has been sufficiently established, there remains only the simple epithelial layer of the inner coat, of which kind of structure the capillary wall also consists, according to the researches of the last few years. Now C. believes that he has demonstrated openings (stomata) between the individual epithelial plates, by means of injections of silver, and therefore considers the existence of canal-like spaces in the wall of the vessel more than hypothetical, and does not doubt, every dilatation of the vessel increasing their size, that they may come into play in the simple process of exudation.

In regard to the second part of the question, it is necessary to observe that the white corpuscles, as long as they advance in an uninterrupted stream, preserve the spherical form, the state of their greatest contraction; that, on the contrary, as soon as they rest for any length of time, amœboid movements rapidly become manifest. When, therefore, under the pathological conditions above considered, the colorless corpuscles stagnate in the peripheral stratum of the veins, it is an easy matter to see that the ultimate effect of the amœboid movements which now supervene, must be a penetration into the wall of the vessel, as they can extend the protrusions now formed only against those points which offer the least or no resistance, and these are the stomata and canals of the connective tissue. The red blood corpuscles, as is well known, do not possess the power of contraction so as spontaneously to alter their form, and all their movements must be attributed to impulses exerted upon them from without. There remains, therefore, nothing to explain their exit from the capillaries, but the increased pressure of the blood, which, in consequence of the simultaneous diminution of the resistance of the arteries with their dilatation, must supervene in the capillaries to the same extent as in the arteries. Whether the augmented pressure of the blood can become sufficient to force the red blood corpuscles through the somewhat distended, but otherwise unprepared wall of the vessel remains undecided; experi-

ence, however, teaches that red blood corpuscles are never seen to force their way through the wall of the vessel, unless white ones have passed through before, and have thus caused a certain dilatation of the stomata.

While the described processes have taken place in the vessels, the remaining tissue of the mesentery has been in no way altered; *the basis-substance of the connective tissue is just as transparent as before, the nuclei, the epithelial, as well as those of the connective tissue, are seen in the same form and at the same place, with undiminished distinctness*, provided that they are not concealed by exuded blood corpuscles. While most of the exuded red blood corpuscles remain in the immediate neighborhood of their capillaries, the white ones recede further and further from the vessels, to make room for other emigrants, and gradually, thickly crowded, break through the tissue, and arrive, finally, by way of the "stomata," shown to exist between the epithelial scales by Recklinghausen, Oedmanson, and others, on the surface of the serous membrane, where they take part, with the plasma exuded at the same time, in the formation of the fibrino-cellular layer characteristic of peritonitis. After carefully separating this latter, the epithelium may very often be brought to view again, a proof *that the latter also* takes no part in the cell-formation of inflammation, but only perishes, if at all, when cast off.

In the microscopic examination of spontaneous fibrino-purulent pleuritis and peritonitis, C. observed the same conditions, and there can be no doubt that the laws found to obtain in serous membranes are generally valid for all acute inflammations. The new formation of the "pus cells," which was formerly attributed to the inflamed tissue itself, must now be wholly transposed to those organs of which we know by sure physiological experiments that colorless blood corpuscles are produced in them, *namely, the lyphatic ganglions and the spleen;* and, indeed, during the inflammatory process, these organs are found to be in a state of marked hyperplasia. Moreover, without vessels there is no inflammation; *dilatation, injection, and hyperemia necessarily form its first part;* in vascular parts the vessels normally appertaining to them are implicated; in non-vascular ones, the neighboring vessels, which being the medium of their nutrition under normal circumstances, also constitute the point of origin of their inflammatory changes. The presence of vacant spaces permitting the passage of the colorless blood corpuscles, has proved to be the second condition. Such canal-like

dilatable spaces are present in the connective tissue, and this is the reason why the suppurative process is still united to the connective tissue, why suppuration in the compound organs runs its course in the interstitial substance. In cartilage, which belongs to the series of connective tissues, but in which canal-like hollow spaces are wanting, nobody has, as yet, observed real suppuration. The daily observation that an inflammation may retrograde without any injury to the integrity of the affected part, is now construed without difficulty, by the explanation that just as the exuded plasma may be absorbed, so also the lymph corpuscles which have wandered out of the vessels to a new position, may leave this and be "discussed" in the neighborhood and in the lymphatic vessels, and thus the affected part which has not been essentially injured, may remain unaltered. C. observes, furthermore, that there is now a rational explication of the beneficial effects of local and general blood-letting, and that the old experience now seems very plausible, that the development of pus may be restrained under the influence of energetic cold which prevents the dilatation of the vessels, while increased warmth, on the contrary, must promote suppuration. He also alludes to the fact, to which Traube first called attention, that pus corpuscles make their appearance in the urine in every case of nephritis, although *post-mortem* examination does not show any complicating cystitis or pyelitis, and explains this phenomenon by the emigration of colorless blood corpuscles from the glomeruli, and he, finally, directs attention to pneumonia, in the course of which such immense numbers of pus corpuscles may accumulate in the alveoli without any trace of change in the surrounding connective tissue, and without any alteration in the flattened epithelial scales of the air cells, pointing to them as the source of the pus corpuscles.

We would only remark, in addition, that recently, Fried. A. Hoffman, in a paper on the development of the pus in the cornea, (*Virch. Arch. tom 42*, page 204), has confirmed the observations of Cohnheim, and Prof. Thiersch, (*Pitha und Billroth Hdb. d. Chirurgie, tom 1, Abeth. 2, Heft 2*, page 539), has also in part convinced himself of their correctness, although he withholds all criticism until further investigations.

CORRESPONDENCE.

LETTER FROM PHILADELPHIA.

PHILADELPHIA, MARCH 15, 1869.

EDITOR OF THE WESTERN JOURNAL OF MEDICINE—*Dear Sir:* As mortuary and hospital reports are always interesting to the profession, I venture to commence my letter with brief extracts from the annual reports of the Board of Health, and Officers of the Philadelphia and Pennsylvania Hospitals, issued for the year 1868.

The first report exhibits the mortality of the city, as follows:

Total number of deaths,	14,163
Adults,	6,888
Minors,	7,805
Males,	7,674
Females,	7,109
Boys,	4,153
Girls,	3,652

Among the adults, the largest number of deaths occurred in the month of April—seven hundred and nineteen.

The month of July was the most fatal to the children, as indicated by the great number of deaths occurring during that month—one thousand, two hundred and seven.

July shows the highest number of deaths—one thousand, nine hundred.

November the lowest number—eight hundred and seventy-eight.

Nativities of the deceased were:

United States,	11,080
Foreign,	2,969
People of color,	769
Unknown,	644

Among the diseases enumerated as "causes of death," "Phthisis" stands first on the list, contributing to the adults one thousand, five hundred and eighty, and to the minors two hundred and sixty-six. Then follow,

INFLAMMATION OF THE LUNGS—

Adults,	308
Minors,	385

DISEASES OF THE HEART—

Adults,	327
Minors,	58

Among fevers, typhoid is the most prominent in the adult class—scarlet with the children. Coup de soleil, one hundred and four. Casualties, one hundred and sixty-eight. Suicides, twenty-nine. Murders, twenty.

These close a list embracing fifty diseases and conditions given as "causes of death." The two last do not speak well for the social and moral condition of the inhabitants of the "City of Brotherly Love."

Turning to the hospital reports, we have that of the Philadelphia Hospital, by the recording clerk, incorporated with the report of the Board of Guardians of the Poor, this institution being a department of the Blockley Almshouse. The Almshouse is one of the largest eleemosynary institutions in the country, and embraces the Out-Door Department, Out-Ward Department, Philadelphia Hospital, Philadelphia, Hospital for the Insane, and the Children's Asylum.

ALMSHOUSE—

Number receiving out-door relief,	144,542
Number admitted into the House during the year,	38,627

INSANE DEPARTMENT—

Number treated during the year,	1,015
Discharged as cured, improved and unimproved,	224
Died,	111
Remaining,	680

HOSPITAL DEPARTMENT—

Patients treated,	6,202
Discharged—cured,	3,925
Improved,	900
Died,	569
Remaining,	808

Mortality for the entire hospital, nine and seventeen-one hundredths per cent. Excluding the foundlings and the phthisis, it is reduced to seven per cent.

The Pennsylvania Hospital Report is a more elaborate document, and is presented to the public in the form of a handsome octavo volume, bound in cloth. The plan adopted in the preparation of the report is the same as that of the London hospitals, and I think this hospital is the only one in this country issuing its report in this way.

This volume, the second thus far issued, is edited by Dr. J. M. Da-Costa and William Hunt, members of the Medical and Surgical Staff, and is dedicated to Prof. Geo. B. Wood, M. D., who was for many years physician to the institution. Besides "Abstract of Cases and Statistics," it contains papers of a practical character, based chiefly on observation made at the hospital. I hope at some future day to notice at length this very valuable work. At present, time and space only permit me to commend it to the attentive perusal of all the members of the profession who are interested in the development of our hospitals, and in the proper utilization of the vast amount of material they contain.

From the statistics for the year 1867–68, we learn that the number of patients treated was one thousand, nine hundred and fifty-eight.

Of the patients discharged, the proportion cured was, - -	71.43	per cent.
" relieved, - - - - - - - - - -	10.99	"
" removed without material improvement, - - -	7.27	"
" discharged for misconduct or eloped, . - -	1.78	"
" died, - - - - - - - - - - -	8.53	"
Cases of accidental injury treated during the year, - - - -	768	

Since the establishment of the Hospital in 1752, there have been admitted into it eighty thousand, nine hundred and sixty-eight patients, of whom fifty-two thousand, four hundred and fifty-four were cured, and seven thousand, seven hundred and eight died. During the year, a new *Clinique* has been erected, connected to the main building by a short covered passage way. A building designed especially for clinical instruction has been long needed, and the one erected, though defective in some very important particulars, is a decided improvement upon the contracted quarters in the "cupola" of the hospital building.

I have on my table a monograph by Dr. Addinell Hewson, "On the influence of the weather over the results of surgical operations, and on the value of the barometer as a guide in the choice of the time for and the prognosis in such operations as shown by the results of immediate amputations, during a period of thirty years in the Pennsylvania Hospital." This is certainly a new field of investigation, and the conclusions arrived at are both novel and interesting. An examination of the tables prepared by Dr. H., shows that the most unfavorable results have followed operations performed in the months of December and May, two months almost as much antipodal of each other, as regards temperature, as any other two in the whole year. From the fatal effects of shock, we have December also taking the lead, and

immediately followed by November, June and May, as giving the next highest in order. For deaths from pyæmia, etc., we have the last months of the summer and spring terms giving the highest rates for the year.

As to successes, the month which stands preëminent in total results, is that of October, then comes January, and then April. October, eighty-nine per cent.—April, over eighty-six per cent.

From the effects of shock, it will be observed that there was not a single death amongst all the cases operated on in the months of October during the whole thirty years. The months which follow this as yielding the least mortality from this cause, are September, August, January, March and April.

From fever, pyæmia, etc., we find the months of February presenting the same clean record that October did for shock, and after it we have the months of November, December and January giving the next least mortality.

The conclusions are, that fatal results from shock occur in a constant ratio with the dryness of the weather, and that those from fever, pyæmia, etc., bear a direct ratio to the opposite state.

In connection with this subject, it may be interesting to note the fact that the mean temperature of the past forty-four years, as shown by the records kept at the Pennsylvania Hospital by Dr. John Conrad, is fifty-three and one-half degrees. The warmest year was 1828, fifty-five and three-fourth degrees; and the coldest, 1837, forty-nine degrees.

During the past two weeks, the various medical institutions of this city have held their annual commencements. I think that we have *nine* of all kinds—two Eclectic, two Homœopathic, one Woman's, two Dental, the Jefferson College and the University of Pennsylvania. It is safe to assert that four hundred and fifty degrees were conferred by these different institutions.

At the seventeenth annual commencement of the Women's Medical College of Pennsylvania, the degree of Doctor of Medicine was conferred upon fifteen graduates. Latterly, much interest has been manifested in the question of the status of female physicians, and the relations which should exist between them and members of the profession. If it is true, as asserted, that three of the most prominent physicians of this city, one of them a distinguished professor, have accepted positions as consulting physicians to the hospital in charge of the Women's Medical College, then this fact must be accepted as an evidence

of a decided reaction in public opinion. It is also stated that the reason given by these gentlemen for their action is, as they are unable to prevent the movement, the next best thing for them to do, is to guide it properly. Certainly very good logic if the premises are correct.

Leaving the entangling question of women's rights, I return to note briefly the incidents connected with the annual commencements at the University of Pennsylvania and the Jefferson Medical College. As has lately become the custom, and a very good one it is, the commencement exercises of the University were held in the Academy of Music. The degree of Doctor of Medicine was conferred upon one hundred and twenty-eight graduates, representing twenty-three States, and the valedictory address was delivered by Prof. Alfred Stillé, M. D. This address, as with everything which emanates from the pen of the distinguished professor, was an able production and well suited to the occasion.

The forty-fourth annual commencement of the Jefferson Medical College was held at the Musical Fund Hall. The degree of Doctor of Medicine was conferred upon one hundred and twenty-six graduates, representing twenty-three States. The valedictory address, by Prof. Samuel Henry Dickson, was one of the gentleman's happy efforts, graceful and learned. The alumni of the college will fully appreciate his remarks upon the retirement of Prof. Robley Dunglison. I give you the following extract:

"Many of you have missed personally, and all traditionally, during the past session, as we lament to miss now from among us, a once familiar face, a manly presence, full of intelligence and dignified simplicity. The place which he of whom I speak, long occupied, shall know him no more forever; but he has left imperishable records of worth and usefulness as teacher, author and administrator; honored and loved as instructor; "primus inter pares," in the midst of his colleagues. The annals of our school contain no name more distinguished than that of Robley Dunglison; none more dear to those who have had the happiness to enjoy his society and profit by his wise counsels, his frank cordiality, his kindly and courteous manner. We offer him the homage of our respectful remembrance in his patient retirement, our profound sympathy with his suffering."

The classes this year were not as large as usual, owing, no doubt, to the re-opening of the schools of the south and west. For the past two or three years, summer courses of lectures have been given at the University and Jefferson College. At the former, the subjects lectured upon are, Zoology and Comparative Anatomy, Botany, Mineralogy and Geology, Hygiene, and Medical Jurisprudence and Toxicology. In

the autumn, a preliminary course is given upon Microscopy, Regional Anatomy, Physical Diagnosis, Diseases of the Skin, and Morbid Anatomy. At the Jefferson College, the course is strictly practical, embracing important specialties in medicine and surgery, with extensive clinical illustrations, as Clinical Surgery, Clinical Obstetrics, Medical Jurisprudence and Toxicology, Materia Medica and Therapeutics, Clinical Medicine, Visceral and Surgical Anatomy, Operative and Minor Surgery, Operative and Aural Surgery, Venereal and Cutaneous Diseases, Pathological Anatomy, and Surgical Diseases of the Genito-Urinary Organs.

While on a visit to a friend at Newport, Rhode Island, last October, I had the opportunity of examining the Earth-Closet, the invention of Rev. Henry Moule, of Fordington Vicarge, Dorsetshire, England. My friend, during a recent visit to England, became so fully impressed with their value as substitutes under almost all circumstances, for the ordinary privies and water-closets, that he imported two Commodes. Recently, one of these was sent to this city, and placed, by the direction of Dr. Addinel Hewson, in the lower surgical wards of the Pennsylvania Hospital. In these wards it was used by twenty patients, (the hod is calculated to hold from eighteen to twenty evacuations), and the contents were not removed until evening. Patients in the fracture-beds were each given a paper bag, holding about a pound of dry earth, and were required after using the bed-pan (attached to each fracture-bed), to empty the contents of the bag into the pan. Although the Commode stood in the middle of the ward, surrounded only by a screen, still there was not the slightest odor perceptible.

Col. Geo. E. Waring, of Newport, Rhode Island, in a pamphlet upon the subject, states the principle to be "the power of clay and the decomposed organic matter found in the soil to absorb and retain all offensive odors and all fertilizing matters; and it (the closet) consists, essentially, of a mechanical contrivance (attached to the ordinary seat) for measuring out and discharging into the vault or pan below, a sufficient quantity of sifted *dry* earth to entirely cover the solid ordure and to absorb the urine."

Reflecting upon this absorbent power of clay, Dr. Hewson was led to use it as a dressing to suppurating wounds, and so satisfactory were the results obtained in these cases, that since February 9th, every case, no matter of what character, has been submitted to the dry earth dressing. Its advantages have been most fully demonstrated in cases of scald and burns, and intractable bed-sores. In the former, when

applied immediately upon receipt of the injury, the pain is at once relieved, and the reparative process goes on rapidly. In the latter, and also in all chronic ulcers, its action is most decided. In one case of paraplegia, in which there was dribbling of urine, the offensive urinous odor was entirely removed, and the patient made comfortable, by placing a layer of earth, protected by the sheet, beneath the buttocks. The patients speak of it in the highest terms, as a cool and pleasant dressing, and it is by far a *cleaner* application than those ordinarily employed. The results are truly remarkable, and have been critically examined by Dr. H. His experience thus far, confirms him in the belief that the earth acts not alone mechanically, but chemically—that, under its application, chemical action takes place as indicated by the fact that the pus, from the wounds, is found by the litmus paper to be neutral, instead of alkaline, its normal state. May it not act, he suggests, upon the exudations from the tissues so as to prevent alkaline fermentation, and thus prevent the formation of pus?

This subject is of great interest, and its consideration by Dr. Hewson, will furnish an article in the next Pennsylvania Hospital Reports.

I observe, by a circular sent me, that an earth-closet company has been established in this country, at Hartford, Connecticut. This will, I hope, secure the speedy introduction into use of this valuable invention.

Yours, very truly, J. E. M.

FROM BERLIN TO VIENNA.

VIENNA, JANUARY 8, 1869.

DEAR EDITOR: Almost embowered among a grove of trees at the far end of a broad boulevard that skirts the crumbling old wall which formed her medieval ramparts, stands a handsome, square, stone building of the chaste Doric style, which is known as the University of Halle Saxony. Ascending a broad flight of stone steps, graced on each side by a recumbent statue of a bronze lion, we enter a high, spacious hall, around which in small wire-protected frames the announcements of lectures are posted. Another flight, and we stand upon the level of the various lecture rooms of all the departments of science. Four fluted columns of stone on each side, support the ornamented roof, extending the distance of the second and third stories. The rooms are all small, and furnished simply with the long wooden

benches of our country school houses, and a small pulpit for the lecturer. The hours of lectures are denoted by placards on the various doors, and are so arranged that several departments of science are taught in the same apartment during different hours of the same day; thus discourses on philosophy, medicine, mathematics or theology, may all be delivered in the same room. The clinical instruction always occurs in the hospital building; and except the branches of anatomy, physiology and chemistry, all the branches of medicine in this, as in all the schools of Germany, are taught there. The University of Halle numbers now some seven hundred students in all its departments—mostly theologians. The school was founded in 1694, in the old building, and received a considerable accession in 1817 by the transfer of the college at Wittenberg, the scene of Luther's action. The proximity of the city, however, to Leipsic and Berlin, injures it very materially, in its medical advantages, as the celebrities of the profession are always attracted there. Oldhausen is the professor of obstetrics at present; being, however, one of Martin's assistants, it was fair to suppose that his views were mostly imbibitions. And as our haste to Vienna was rendered urgent by the fact that most of the short courses would commence in the following week, we were fain to content ourselves with the above mentioned visit to the University.

We pushed on through Leipsic—only a day for the city and its old University, a long pile of yellow buildings, part of the Augusteum, facing the main square of the city, a hurried glance through its lecture rooms, and its aula, a large saloon of busts and statues of Saxon Princes, with twelve reliefs of the history of education, then a peep into several of the old antiquarian book stores, which only made us lament our limited means, for all the curiosities and relics of literature in all languages are there. Leipsic is the grand center of the book trade in Germany. It has some one hundred and ninety-two book stores, forty printing offices, one hundred and nine hand and one hundred and thirty-nine machine presses. During the Mässe, which are great fairs held three times a year, and which attracts "Armenians, Turks, and dwellers beyond Jordan," book dealers from all civilized lands visit the city for purchase and sale. A few years ago they erected their own exchange, which is now their business resort.

Two days travel on a rather circuitous route, carries us into Würzberg, one of the wealthy cities of the little kingdom of Bavaria, whither we have come to see and hear Scanzoni. Most of the public buildings of the city were erected at a time when Würzberg was a free

city, the capital of an episcopal see, which position it held upwards of a thousand years, under the successive jurisdiction of some eighty-two bishops. Hence the buildings have been erected with that lavishment of means which the very large revenues of such positions permit. The hospital is an immense structure, covering more than two solid squares, inclusive of the medical college in its rear. The endowment of the whole institution is some two and a half million dollars in gold; it contains about six hundred inmates, of whom not more than one-half are patients; a large, handsome bronze statue of Julius Echter, its founder, one of the city's primates towards the latter part of the sixteenth century, stands at the front. The appointments of the whole building are even much finer than those of the Charité of Berlin. The consequence of this rich endowment, is the security of a magnificent faculty, for which this institution has always been famous. Kölliker on microscopic anatomy, Bamberger on internal medicine, Recklinghausen on pathology, and Scanzoni on obstetrics, are among the most famous. The lying-in hospital stands apart from the main building, forming a neat, rather small two story stuccoed building, with accommodations for about fifty cases, which is a fair allowance for a city of only forty thousand inhabitants. By the kindness of Dr. Mundi, Prof. Scanzoni's first assistant, we were permitted to visit the building and make the rounds with him. Patients are divided into first, second and third classes, according to their means, the latter class being charity patients, and private apartments are furnished for those sad cases in the upper circles in which "a child is found for the cradle before a husband for the bed." Except one or two cases of pelvic abscess, the wards were remarkably free from disease of any character on our visit, much to our wonder, for every window throughout was as hermetically sealed as the general German hygiene in practice demands—the peculiar puerperal odor was actually sickening. The immunity of disease under such conditions can only be explained on the thorough habituation from infancy on, and the intense aversion every son of Teutonia cherishes against a draught. The babies were all bundled and rolled, and their little arms tied down inside, so that they could be lifted by any one of half a dozen hands and tossed about like a papoose with perfect impunity. The delivery bed was elevated at the back to such an extent as to cause the assumption of a semi-recumbent posture in labor, resembling no little some of the old Gebär Stühle or delivery chairs, which were so common in Germany fifty or sixty years ago, and which are now universally discarded. The lec-

ture room contains a very fine array of instruments and a valuable collection of deformed pelves; the original Robert's pelvis, in which the transverse diameter was contracted to two inches, while the conjugate remains normal, being among the number. Among the novelties may be mentioned a peculiar cephalotribe, an invention of Scanzoni's, which merits a description. In addition to the two blades of the ordinary cephalotribe, the instrument was provided with a perforator, whose extremity was a pointed ovoid of perhaps an inch in diameter, the outer surface grooved or threaded like a screw; after the cephalotribe is applied in the usual manner, the perforator is passed between the handles, thrust through the cranium or fontanelle, as the case may be, and then carried on through the brain until its point lodges in the foramen magnum, several turns of the handle screw it into the foramen, when the handle of the perforator is attached to the handles of the cephalotribe by a clamp. The advantage claimed for it is solidity of grasp; the attachment at the base of the head and in its most unyielding bone, even into the commencement of the spinal canal, will not permit it to glide. We were informed that on the manikin the instrument worked charmingly; an opportunity for its application in utero had not, as yet, presented. The only objection that occurred to us, would be the adjustment of the machine, for its complicated character certainly entitles it to that name. A finger, provided with the educated obstetrical eye, might recognize the foramen, if it could reach it; but the ocularisation (?) if of the end of a twelve inch steel rod, would imply a delicacy of tactile sensibility in the hands of the manipulator, that it would require an eye of faith to take cognizance thereof. We do wrong, however, in attempting a jest on a scientific subject. If the pointed end could be fastened into the occipital bone anywhere, it is probable that it would answer the purpose. Scanzoni, himself, is a type of a gentleman and a scholar, and we could not avoid contrasting him in this light with some of his numerous detractors, who all suffer by the comparison. In person, rather portly, now that he is verging on to his sixth decade, with a genial, placid face, pleasant to look upon and that feels at peace with itself and mankind, a clear, rather full eye, beneath a lid with that redundancy of tissue which the physiognomists tell us is a sign of decision, never dull or slow of comprehension, for it shoots a quick glance out of its angles occasionally, which takes cognizance of things which are not always mentioned; in manner affable, courteous, more, even inviting, delivery easy, elegant, chaste; as he leaned on the bed, with one hand in gesture over it and one slipped

in his pocket, in perfect self-possession, expressing himself on his subject in the most beautiful language, without effort or affectation, we felt our respect for him rapidly warming from curiosity to veneration, and left him finally, in our regard, as our ideal of an obstetrician.

The discourse was on the subject of hæmatoma, selected, as he said, from dearth of material, a difficulty, we were informed, with which his clinic is frequently afflicted; yet he pictured the case so clearly and forcibly as almost to render the presence of a patient unnecessary.

Scanzoni is a disbeliever in the frequency of this disease. In twenty-five years he has met with but *three* cases in which he could conscientiously state that hæmatoma existed. Just from a school, as we were, in which this was a disease of daily diagnosis, this was rather a strange statement, explicably partly, however, from the difference of different authors' conceptions of the disease; Scanzoni only regarding those cases as blood tumors, in which an effusion really occurred in the peritoneal cavity, and that generally in the cavity of Douglas, retro-uterine; whereas, according to Martin, the most frequent seat of extravasations is between the folds of the broad ligaments, the most of which cases Scanzoni regards as simple perimetritis without effusion.

In his lecture, Scanzoni narrated a peculiar case in which it became necessary to establish a diagnosis between a hæmatoma and a retroverted pregnant uterus. The introduction of the sound, which in other cases would have been sufficient, was here, for evident reasons, necessarily excluded. By placing the patient on elbows and knees, however, he succeeded in establishing a reposition of the retroverted uterus as the case thus proved to be, and the pregnancy terminated favorably. Scanzoni is deservedly a great favorite among his patients, of whom, as you can well imagine, he has a goodly quantity, and a choice. For two visits to the Empress of Russia, recently, during one of which he was only present in case his aid might be called, he received, as his assistant informed us, some thirty thousand dollars in gold, besides a residence and a handsome equipage. He has refused a dazzling offer from Baden Baden, one of the former assistants in the hospital there informed us, as it would remove him from his school.

We were unable to see Kölliker, who would not lecture until the following day. Bamberger we met at a post-mortem by Recklinghausen. He is altogether about the last man whose outward appearance presents any index of the ability which characterizes him. Small in stature, with heavy side whiskers which almost completely conceal his features; he stood there the picture of wrapt attention over an autopsy

of one of his patients which he had followed to the end. He enjoys the reputation of being one of the finest clinicians of Germany. His two late works on Diseases of the Heart and Abdomen, are considered standard.

Munich has a very fine university, a spacious stone structure, with elegant appointments, erected by the late King Lewis I, whose munificence in every respect has contributed so much towards rendering this one of the most beautiful cities of the world externally, as well as enriching her galleries and nurseries of art and science, with untold treasures within.

During our entire stay in the city, although we made it exceedingly profitable and interesting in sight-seeing, we were unable to glean anything of medical interest, on account of the inopportune season of one of the numerous church holidays, which are religiously observed by all the schools. We contented ourselves, therefore, with the purchase of photographs of Liebig and Pettenkofer, of world wide fame, and of Hecker, the present professor of obstetrics, and hastened on our way. As true disciples of Esculapius, however, we could not resist the temptation of visiting the home and haunts of Paracelsus, so that we were detained another day at Salzburg, Austria. A beautiful little city we found it, encamped down amongst some of the loveliest scenery which nature could command, and rich in historical interest. Mozart's birthplace and home, Hayden's home, the residence of the family of Weber, three of the world's greatest composers. What being who has ever heard the music of these three inspired men as rendered by the royal operas of these Calliope-worshiping people, who would not feel an inspiration in traversing the scenes of their daily lives? Not far from the bridge crossing the river which bisects the town, crowded in among its neighbors, stands a high house with dark weather-scarred walls, bearing about its centre a half-effaced portrait of the celebrated naturalist and empiric, Paracelsus. This was his home—nothing else to be learned of him there. His manifold virtues, which he himself heralded forth trumpet-tongued, have not been sufficient to have preserved a single relic of our hero's greatness. The first half dozen whom we interrogated, could not direct us to his house. A little more than three centuries have elapsed since our great medical Munchausen, the prince of braggarts, flourished in the hight of his glory, healing diseases like the traveling charlatans who take up a temporary abode in our western cities until suffering humanity elsewhere makes a sudden call for relief in other quarters; but his reputation has been, alas! almost as evanes-

cent as theirs. Paracelsus adopted every precaution to propagate his name and fame to posterity. In the vestibule of the church of St. Sebastian, there is a large monument built into the wall over his grave, a tall column of red marble of obelisk shape, resting on a square base, on the anterior surface of which a scroll bears the following modest epitaph: "Insignis medicinae doctor, qui dira illa vulnera lepram podagram hydropsim aliaque insanabilia corporis artes subtulit."

Another day *en route* and we are snugly domiciled in Vienna, the place of the present writing; and still another beholds us in avail of the magnificent advantages of the clinics of, perhaps, the most practical school of medicine in the world, of which, anon.

WHITTAKER.

BIBLIOGRAPHY.

A TREATISE ON THE DISEASES OF THE EAR.

BY ANTON VON TROLTSCH, M. D.,

Professor in the University of Wurzburg. Translated by D. B. St. John Roosa, M. D., Clinical Professor of the Diseases of the Eye and Ear in the University of New York. Second American, from the Fourth German Edition. Wm. Wood: New York, 1869. For sale by C. P. Wilder, Indianapolis; Robert Clarke & Co., Cincinnati.

No branch of the noble art of healing has been so much neglected as that of aural surgery. This neglect has certainly been due to a very general impression that very little could be done for the affections of the organ in question. But a patient and concentrated attention given to its pathology, has lately done much to enlighten the obscurity surrounding the subject, and demonstrated the practicability of doing much for the relief of aural diseases. This is certainly a *desideratum*, when we consider how frequently they present, and how generally one of the most important senses is thereby impaired. To the busy, general practitioner, few sources of information on this subject, have been accessible. In fact, hitherto, the only one was the very excellent work of Toynbee.

In the volume under consideration, the medical man will find a complete exposition of all that relates to aural science, with all the latest improvements in treatment, which have done so much to force a recog-

nition of the importance of this branch of the medical art. It is a consideration of facts, garnered in years of patient investigation and practice. The book is presented in the form of lectures, but is much more systematic than is usual in such arrangement. The classification and nomenclature of diseases, is not entirely satisfactory, after having considered the admirable system of Toynbee; but this is a point of minor importance, especially when the great practical excellence of the book is so patent. Every detail of practice is thoroughly illustrated and explained; more than a hundred pages being devoted to the most improved plans of examining the outer ear, the use of the eustachian catheter, and Politzer's and Valsalva's methods of investigating the diseases of the tympanum. The anatomy of the organ is given in a clear but concise manner. As regards therapeutics, the most approved plans and agents are minutely considered. Most of them will be found to be novel; but, based as they are, on simple principles of science, will command confidence.

The American physician is deeply indebted to the translator for presenting this admirable work, as well as for his translation of Stellwag on the Eye, the latter, filling, as it did, a wide chasm in English ophthalmological literature. J. G. R.

PATHOLOGICAL ANATOMY OF THE FEMALE SEXUAL ORGANS.

BY JULIUS M. KLOB, M. D.,

Professor in the University of Vienna. Translated by Joseph Kammerer, M. D., and Benjamin F. Dawson, M. D. New York: Wm. Wood & Co. For sale by C. P. Wilder, Indianapolis; Robert Clarke & Co., Cincinnati.

This translation, first issued about a year since by a New York firm no longer in existence, has now become the property of the veteran publishers, Wm. Wood & Co. In a previous number of the **Journal*, we made a brief analysis of the book, giving it such hearty commendation as its careful study led us to believe was quite just. By the judgment then expressed we are quite willing to abide. The highest critical †authority in Great Britain in our profession, has recently, January last, spoken of it thus: "A translation of *Klob's Patholog-*

**Western Journal of Medicine*, 1868, page 375.

†*British and Foreign Medico-Chirurgical Review.*

ical Anatomy of the Female Sexual Organs, has been fairly accomplished by Drs. Kammerer and Dawson, of New York, and we welcome it here as a work of great use to those whose attention is specially directed to those organs." T. P.

PENNSYLVANIA HOSPITAL REPORTS, VOLUME 11, 1869.

Philadelphia: Lindsay & Blakiston. For sale by C. P. Wilder, Indianapolis; Robert Clarke & Co., Cincinnati.

The contributors to this handsome volume are Drs. Hewson, Morton, Da Costa, Hutchinson, Edward Hartshorne, Ashhurst, Hunt, J. F. Meigs, Packard, Agnew, Harlan, Richardson and Pepper.

As our talented Philadelphia correspondent, Dr. J. Ewing Mears, proposes the consideration of this volume in a future communication, we will now merely say that these reports are nearly, if not quite, equal to those for 1868, and that they are creditable alike to the editors and publisher. We hope both parties may be encouraged by seeing this annual widely circulated. T. P.

A HAND-BOOK OF UTERINE THERAPEUTICS, AND OF DISEASES OF WOMEN.

BY EDWARD JOHN TILT, M. D.

Second American edition, thoroughly revised and amended. New York: D. Appleton & Co. Received through Bowen, Stewart & Co., Indianapolis.

The author has revised the third British edition of his well known work, for re-publication in this country, and contributes a preface to this American issue.

A communication made a few months since to the *Lancet*, and which struck us as being of such interest that we re-published it in this *Journal*,* constitutes a large portion of this preface. In the course of it, Dr. Tilt compliments "the splendid achievements of those American surgeons who have taught us that we can safely remove ovarian tumors, and how to cure vesico-vaginal fistula;" and justly speaks of his admiration of "the surgical genius, great skill, and the perfect honesty of purpose that characterize Dr. Marion Sims, who is an honor to his country and to our profession."

Western Journal of Medicine, 1868, page 310.

The author states that the main points to be developed in "*Uterine Therapeutics*," are:

"*Firstly*—The paramount importance of hygiene for the relief and cure of diseases of women.

"*Secondly*—The constitutional nature of many diseases of women, and the impo sibility of curing them without constitutional remedies.

"*Thirdly*—The manifest reaction of uterine diseases on the female system, and the impossibility of curing many uterine complaints, without surgical measures.

"*Fourthly*—The great value of therapeutics to assuage and cure diseases of women, and the belief in the value of those remedial measures, that are as old as medicine itself—such as venesection, emetics and caustics."

The preface concludes thus:

"It affords me very great pleasure to shake hands, as it were, in this preface, with so many valued American friends. A common language unites the members of the same profession in America and Great Britain, by the strongest bonds of affection; and there is no danger of it being severed by difference of climate and form of government, or even by those occasional causes of misunderstanding that, for party purposes, are magnified by professional wire-pullers.

"This union of the two professions is the type of the perfect unity that should ever exist between the great Anglo-Saxon nations, to whom Providence has given progenies to people the waste places of the earth, and the firm determination to weigh more and more heavily in the scale of nations for the welfare of mankind."

Following the preface, is the *Introduction*, in which various topics are discussed, e. g., Difficulties Besetting the Study of Uterine Complaints, Lady Practitioners and their Chances of Success, Old and Modern Pathology, Diseases of Women to be Studied by the Light of Menstruation, *et cet.*, *et cet.*

The following observations we commend to all our readers, especially to the junior members of the profession:

"To be successful in the treatment of the diseases of women, a young medical man should make women the study of his life, so as to understand their mental peculiarities as well as their physical constitution; and if, with equality of medical skill, the senior practitioner is much more successful in the treatment of women than the junior, it is that he has discovered how to bespeak their confidence, to stimulate their hope, and to keep up their perseverance until the recovery of health."

The conclusion of this chapter, too, is admirable:

"We must trust in nature, and believe that an Almighty power is operating in the human frame, ever working to restore health by successive changes and renewals, having definite laws and successful issues, often erroneously ascribed to our remedies. Let our motto be that of the father of French surgery: "JE LA PANSAY, DIEU LA GUARIT."

In referring to female physicians, the author states that the principal reason why the knowledge of diseases of women has so little advanced, is, the hitherto undisturbed belief that one sex only is qualified, by education and powers of mind, to investigate and cure what the other sex has alone to suffer; and then a little while after, pointedly averts that the great majority of women will continue to consult us, so long as they recognize the mental superiority of man. We have quoted the author's very words, and we fail to be able to reconcile the assertion of man's mental superiority, with the retarding influence which the fact of these diseases not being made the subject of investigation and the object of cure by woman herself, has had upon the advance of knowledge of such diseases. Either the one or the other assertion is wrong.

The first chapter treats of Surgical Appliances and Modes of Examination, and will be found quite up with the most recent inventions in this department of art, e. g., the sponge tents of Dr. Ellis, prepared with carbolic acid, and those of Dr. Aveling, in which permanganate of potash is placed, both of which were presented only last year to the London Obstetrical Society, are referred to. We are somewhat surprised to read from the pen of an author whose generally chaste and classic composition we never weary of admiring, this expression: "pottering on for months." Pottering on may be forcible, but it surely does not come from the "pure well of English undefiled."

The second chapter is upon Uterine Dietetics and Home Treatment; the third, upon Tonics; the fourth, Sedatives; the fifth, Antiphlogistic Treatment; the sixth, Caustics; the seventh, Emmenagogues; the eighth, Hæmostatics; the ninth, Specifics; the tenth, Uterine Misplacements; the eleventh, Treatment of Uterine Complications; twelfth, Treatment of Sterility; thirteenth, On the Treatment and on the Prevention of Uterine Inflammation in India—a chapter which few American readers will ever find of any practical value; chapter fourteenth, Prevention of Uterine Inflammation; and, finally, Formulæ: *et cet.*

Did time and space permit, we would gladly present an analysis of some of these chapters. We must conclude, however, with expressing our very high appreciation of this book as one of eminently practical value. The physician will find its perusal exceedingly interesting, and frequent reference to it exceedingly useful. It is hardly necessary to say, since it is issued by Appleton & Company, that in paper, typography, &c., the book is all that could be desired.

T. P.

A TREATISE ON THE DISEASES OF INFANCY AND CHILDHOOD.

BY J. LEWIS SMITH, M. D.,

Physician to the Infant's Hospital, Ward's Island; Professor in Bellevue Hospital, &c. Published by H. C. Lea, Philadelphia. For sale by C. P. Wilder, Indianapolis; Robert Clarke & Co., Cincinnati.
Price, $5.75.

We believe that the profession generally, feel that there is a place and a need for a good, practical treatise on diseases of children, in American medical literature. We have good works in considerable number, by importation and translation, but we have not now, any native production that is satisfactory. Our author has probably felt this deficiency, though he makes no comparisons, but simply offers his labors so as "to meet the requirements of the medical student and practitioner."

The author has included in his treatise, something more than the mere diseases of children and infants. The first part is taken up with chapters on Infancy and Childhood, Care of the Mother During Pregnancy, Mortality of Early Life, Lactation, Selection of a Wet-Nurse, Course of Lactation, Weaning, Artificial Feeding and Diagnosis of Infantile Diseases. These topics are not treated at any great length, but afford occasion for judicious remark and advice. There are some points that we would like to have seen more elaborated. One of them is concerning the management of the mother, who has become, either directly or indirectly, syphilitic. Details of management and treatment might have been made a satisfactory feature in this chapter, inasmuch as we not infrequently meet with such cases. In his subsequent chapter on syphilis, he treats of it as developed in the child.

In the chapter on Mortality in Early Life, we have the well known causes of it given; but we think, though we may be mistaken, that New York could have afforded sufficiently forcible statistics without relying almost entirely upon those of European cities and countries. His only mention of the proportion of mortality which any particular disease shows is, that scarlet fever is one of the most fatal diseases in New York city. Another suggestive topic too briefly mentioned, is the influence of our school-system on the mortality of early life.

The chapter on Lactation contains brief but pointed remarks on its difficulties and contraindications, such as depressed nipple, too long delay before applying the infant to the breast, tuberculosis in the

mother, constitutional syphilis, inflammatory affections and mammary inflammation. Prominently among the galactagogues are mentioned the use of electrical currents and the castor oil plant. Among the anti-galactics he seems to confide somewhat in Belladonna, a matter in which he does not agree with the editor of the *Western Journal.*

We do not find anything new or suggestive in the chapter on the Diagnosis of Infantile Diseases.

Part II is the practical part of the book, beginning with Diseases of the Cerebro-Spinal System. Here we have a very proper recommendation of the opthalmoscope as a means of diagnosis in diseases of the brain. The results of its use, in the hands of Dr. Clifford Albutt and others, are sufficient to prove that it should not be confined to the specialist.

The chapter on Congestion of the Brain, is wanting in fullness of description, pathology and treatment. In such cases, the young practitioner is glad to have the benefit of the fullest experience. This deficiency is not observed in the author's treatment of the subject of Eclampsia. His remarks on the inhalation and internal use of chloroform, opium and bromide of potasium, will interest and instruct. The use of opium, where the brain is directly or indirectly concerned, requires nice discrimination, and any one who reads and follows his directions, will profit by them. This section closes with an interesting review of the subject of Internal Convulsions.

The section on Diseases of the Respiratory System, occupies about eighty pages. When we come to examine the chapters on Croup and Pneumonia, there are modes of treatment of these diseases which attract notice because of their variance from the established plans. "Loss of blood is not required in the treatment of croup." That, we presume, to be in accordance with American practice. For it are substituted aconite and veratrum viride. A fuller account of the author's experience in the use of these articles would have been better. He employs the tincture of veratrum viride "in doses of half a drop to one drop every three or four hours, for those over the age of three years." As a substitute for calomel in liquefying and removing the false membrane, he says "physicians of this city are using more and more a mixture of chlorate of potassa or of soda and muriate of ammonia given frequently." As a local remedy, he highly recommends from personal experience, the sub-sulphate of iron. He devotes some pages to Tracheotomy of Croup, giving the statistics of Drs. Krackowvizer and Voss. In the treatment of Pneumonia, he gives one drop

of tincture veratrum every three hours, to a child of five years of vigorous constitution; also, antimony with morphia, in the second stage. In feeble children he advises a different course—ipecac, carb. ammon., senega, &c. In blistering, he advises applying cantharidal collodion, in spots of the size of a ten cent piece, half a dozen or more. As the blister treatment of disease is being discussed, we mention this, with some belief in its usefulness.

We have not time to more than allude to one or two topics in the section on Diseases of the Digestive Apparatus. Cholera Infantum is one in which every physician in this country is particularly interested. He does not devote much space to it; we observe, however, that he faintly praises calomel in small doses.

Under the head of Zymotic Diseases, first appears Diphtheria. For treatment, first mention is given to sulphites; but he has no experience that would recommend them. Chlorate of potash and iron are recommended, and also local applications, such as he advises in croup.

Quite a number of important diseases of children are not mentioned. We leave the book with an impression of its incompleteness in many matters. Yet it is the basis of a good treatise. Possibly an addition of clinical matter or matured personal experience, will bring it up to the standard which the author sets up in his preface.

W. C.

OUTLINES OF PHYSIOLOGY—HUMAN AND COMPARATIVE.

BY JOHN MARSHALL, F. R. S.,

Professor of Surgery in the University College, London; Surgeon to the University College Hospital; with additions by Francis G. Smith, M. D., Professor of the University of Pennsylvania. Published in Philadelphia, by Henry C. Lea, 1868. Price, $7.50.

Nothing has appeared in our language, since the last edition of Carpenter's great work, that is comparable to this of Mr. Marshall; and, it is quite singular that it should be produced by a surgeon. Every one interested in physiology has been looking and waiting patiently for a new edition of Carpenter, which should bring us up to the latest accumulations of this subject; but it is to be feared our expectations will not be realized. But Mr. Marshall has given us a work equal in arrangement, and more full and satisfactory on many of the

topics than Carpenter's. So that while expressing our regrets for the apparent close of this great man's labors, we can rejoice in the successful work of the new author.

I wish I could spare the time to offer an extended review of this superb work. It really merits an elaborate comparison with other recent and familiar works, not for the purpose of showing its superiority, so much as to exhibit the rapid and splendid development this attractive science is making. Physiology may be studied in this work from the lowest forms of vegetable and animal existence, to man, the richest and noblest observer of all the marvelous works of the Creator.

Science has discovered that a law of *progression* actually pervades the whole universe, not in the sense of the Darwinian, or kindred theories of *universal development*, which have no established facts nor stringent analogies to sustain them; but the unbroken series in the works of nature which present themselves from the phenomena of bare forms up to the highest manifestations of organization and the vital forces.

In the presentation of the cell doctrine, Mr. Marshall makes allusion to a subject that I have never seen referred to by any other writer, but which I have ventured to teach for fifteen years past as a reasonable inference from the phenomena of all proliferation, and that is, that each tissue and organ is represented in the spermatazoon, when it penetrates the germ cell or ovum of the female and finds there the peculiar pabulum for the beginning of organization. In other words, the different organs of the body cast off imperfect cells or gemmules, which in the generative organs becomes elaborated into the spermatazoa. I do not say that the reader will find the statement I have made so definitely stated; but well defined allusions are made to it.

In a most interesting department, this work falls below our wishes, and that is, in those profound, yet luminous psychological and metaphysical discussions into which Carpenter has entered in his views of the structure and functions of the brain.

I have been struck with the prominence which many of his original views have in recent works, such as Luys (French) on the *Nervous System*, and Maudsley's *Physiology and Pathology of the Brain*, which latter seems to be leading some into the unsatisfactory doctrines of materialism. And while both writers use freely Carpenter's scheme, they are devoid of that reverence and veneration of God which marks that great man's work.

For the present at least, the vaunted pride of science had better

accept the statement of Prof. Tyndall in his recent address as president of the British Association: "That while a definite thought and a definite molecular action may occur simultaneously in the brain, we do not possess the intellectual organ, nor, apparently, any endowment of the organ which would enable us to span by a process of reasoning, from the one phenomenon to the other."

One thing is always to be regretted in the re-publication of English works by the house to which we are indebted for so many, and that is, the miserable wood-cuts; they usually disgrace the works which they are intended to illustrate. Why not get them from our transatlantic friends, if we can not get them made here? C. G. C.

EDITORIAL AND MEDICAL NEWS.

We hope the meeting of the American Medical Association at New Orleans will be largely attended. For years, a great gulf divided between north and south; and now that gracious peace has bridged that gulf, now that the "war-drum throbs no longer," and all battle-flags are furled, the devotees of Medicine—which knows neither clime nor caste, neither political nor sectarian beliefs, which is all-embracing the race as the atmosphere the earth—ought to hasten together with the throbbing of fraternal hearts and to the grasping of fraternal hands. Let the men of the north and of the south, of the east and of the west, meet together in an everlasting peace, revive old memories of harmony and union, and inaugurate new measures for the honor, the dignity and usefulness of the profession. Space does not permit us to urge upon our readers the importance of sustaining by sympathy, and by presence at its annual convocation, the American Medical Association, and especially of attending this New Orleans meeting; nor can we urge certain subjects which we hope will be presented to the Association. However, there is one thing we want to suggest to our brother editors, viz: That we have a meeting of our own at New Orleans, sometime during the period when the Association is in session. We can meet together, become better acquainted, agree, possibly, upon some plan of medical education, for example, upon the most advisable scheme of State medical legislation, and advocate these measures in our journals. What say you, gentlemen of the medical journals, to this suggestion?

LIST OF QUESTIONS AT THE RECENT EXAMINATIONS IN THE MEDICAL COLLEGE OF OHIO.

Prof. Blackman: Surgery—

1. What is an abscess and how diagnosed?
2. Definition and treatment of anuerism.
3. Describe Carden's amputation at knee-joint.
4. Indications for trephining cranium.
5. Best method of reducing verticle luxation of patella.
6. Describe ordinary operation for strangulated oblique hernia.
7. Difference between Colles' and Barton's fracture of radius.
8. Diagnosis between luxation of humerus and fracture of the neck.
9. Differential diagnosis of fracture of neck of femur and luxation on dorsum ilii.
10. Characteristics of luxation in sciatic notck.
11. Best method of reducing luxation of femur.

Prof. Graham: Theory and Practice of Medicine—

1. What are the physical signs of different stages of pneumonia?
2. In valvular disease of the heart, how find the particular valve affected?
3. Diagnose between remittent and typhoid fever.
4. Diagnose between peritonitis and enteritis.
5. Diagnose between lumbago and nephritis.
6. How would you treat a case of acute dysentery?

Prof. Wright: Obstetrics—

1. What are the boundaries of the inferior strait?
2. Name the vertex presentations and the one most frequent.
3. What direction must the *face* assume to make a natural labor?
4. What are the *positive* signs of labor?
5. How manage prolapse of funis in *first* stage of labor?
6. Give symptoms and treatment of puerperal fever.
7. How treat puerperal convulsions?
8. Give signs of rupture of uterus in labor.
9. How treat *unavoidable* hemorrhage?
10. How treat retained placenta?

Prof. Comegys: Physiology—

1. Describe a cell.
2. How is food classified, how digested and how absorbed?
3. What are the chief constituents of the blood and what is the average proportion to the weight of the body?
4. What time is required for the whole to pass through the heart?
5. How rapid is the capillary circulation, and what condition of the vessels is necessary to maintain the normal movement?

6. What effect on the capillary movements results from increased heart action in fever?

7. What is the theory of respiration?

8. What amount of space for each person should be allowed, due regard to ventilation being had?

9. What constitutes a nervous system, and what are the functions of its parts?

10. Give an example of excito-motor, sensori-motor and ideo-motor acts.

Prof. Parvin: Medical and Surgical Diseases of Women—

1. What are the normal dimensions of the unimpregnated uterus?

2. How would you distinguish a simple from a specific vaginitis?

3. The differential diagnosis of a fibroid of the posterior wall and retroflexion of the uterus.

4. Diagnosis between uterine prolapse and hypertrophic elongation of the infra-vaginal neck.

5. The treatment of asthenic amenorrhœa.

6. The treatment of intra-uterine polypus.

7. The treatment of epithelioma of the uterine neck.

8 The treatment of uterine catarrh.

9. How are ulcers of the neck of the uterus divided?

10. The different methods of treating the pedicle in ovariotomy.

Prof. Gobrecht: Anatomy—

1. Describe a rib.

2. Describe a bony thorax.

3. What parts are necessary to form *any* movable joint.

4. Describe the hip-joint.

5. What muscles form the quadriceps extensor cruris, and how are they inserted?

6. What is a satellite muscle (give an example)?

7. Describe the heart.

8. Give the coats of an artery.

9. Describe the lungs.

10. Give the principle divisions of the encephalic nervous mass.

Prof. Bartholow: Materi Medica and Therapeutics—

1. Give rule for administering arsenic.

2. Write a prescription containing Fowler's solution.

3. Describe physiological effects of Calabar bean.

4. What is the nature of the physiological antagonism of morphia and atropia?

5. Under what circumstance would you prescribe morphia and atropia together?

6. Describe the physiological effects of the bromides.

7. What is the therapeutic value of oil and water in the treatment of skin diseases?

8. Give rules for the hypodermic use of remedies.

9. Describe the preparation of calomel.

10. How administer tartar emetic to produce emesis?

Prof. Seely: Diseases of the Eye and Ear—

1. Of what does the organ of sight consist?
2. How many bones enter into the composition of the orbit, and name them?
3. Name the ocular muscles, give their origin and insertion, and the nerves that inervate them.
4. Give structure of the lids.
5. Define accommodation, by a change in what structure is it brought about, and what produces the change?
6. What is the macula lutea, and what the blind spot of Mariotte?
7. Bound the anterior and posterior chamber.
8. What are granulations, divisions, diagnosis, etiology and treatment?
9. Iritis, what its diagnosis, cause, and treatments?
10. What is cataract?

Prof. Conner: Chemistry—

1. Define *base*, *acid*, *salt*, *haloid*, *body*, with examples of each.
2. *Iodine*—From what source obtained, physical properties, combination with other elements, methods of distinguishing iodide from bromide of potassium.
3. *Iron*—Oxides, method of preparing *hydrated sesquioxide* for use in cases of poisoning by arsenic.
4. *Lead*—Physical properties, oxides, lists, effect as poison.
5. General difference between *inorganic* and *organic* compounds.
6. *Carbolic Acid*—From what source obtained, physical properties, solvents of, strength of saturated aqueous solution.
7. *Products of Decomposition of Mineral matter*—Action upon lead pipe of water containing decomposing animal matter; method of purifying water containing animal matter.
8. *Disenfectants*—Classes of, actions of, those commonly employed, methods of employing them.
9. *Alkaloids*—In general, from what obtained, physical properties? Morphia and quinine, how distinguished one from the other?
10. *Urine*—normal and abnormal constituents—tests for each.

THE COMMENCEMENT exercises of the Medical College of Ohio took place on the 1st of March. Judge Dickson—whose scholarly, thoughtful and useful *address upon the occasion, we are sure our readers will rejoice in having the opportunity of reading—represented the trustees in conferring the degrees. Prof. Graham delivered the valedictory, its subject being *Faith in Medicine*, and it is needless to add, that in composition it had the peculiar, vigorous and logical style which characterize the author's habits of thought, and that it was delivered with that graceful oratory which all who have ever heard Prof. Graham know that he possesses.

*In this address, page 197, line 86, for "connected" read associated; also, page 198, second line from foot of page, for "true" substitute good.

GRADUATES OF MEDICAL COLLEGE OF OHIO, SESSION 1868–69

S. W. Anderson, - - Ohio
Henry J. Abbett, - - Kentucky
John D Axline, - - - Ohio
Charles F. Basford, - - - Ohio
William E. Burch, - Kentucky
Daniel N. Brown, - - - Ohio
John H. Bruce, - - - Ohio
Clinton Brown, - - - Ohio
Joseph R. Ballard, - - Ohio
Simon L. B. Blacke, - - - Ohio
Samuel L. Beeler, - - Ohio
A. L. Chenoweth - - - Ohio
Geo. B. Crawford, - - Ohio
Robert H. Calvert, - - Indiana
Robert H. Culbertson, - Indiana
Perry D. Covington, - - Ohio
Lawson Drais, - - - Ohio
Eber G. Dorr, - - - - Ohio
W. Elijah de Courcy, - Kentucky
Jesse O. Davy, - - - Ohio
S. B. Emerson, - - - Ohio
John Ford, - - - - - Ohio
Elijah W. Ford, - - - Ohio
John P. Freeland, - - Indiana
John B. Graham, - - Indiana
Douglass H. Harding, - Indiana
Thomas H. Harrison, - Indiana
P. C. Holland, - - - Indiana
S. S. Horne, - - - Indiana
Henry Haacke, - - - Ohio
Asa B. Isham, - - - Ohio
William H. Jones, - - Kentucky
J. S. Kelsey, - - Indiana
John E. Markle, - - Indiana
J. B. F. Morgan, - - - Ohio
Dennis F. Moss, - - Indiana
I. W. McGinnis, - - Kentucky
John Mackoy, Jr., - - Kentucky
Thomas C. Moore, - - Ohio
John G. McVay, - - - Ohio
Samuel B. Morgan, - Indiana
Nathan T. Noble, - - - Ohio
Thomas Orr, - - Kentucky
Geo. B. Orr, - - - - Ohio
T. S. Potter, - - - Ohio
Lieutellis L. Porter, - Pennsylvania
L. S. Rice, - - - - Ohio
John C. Rickey, - - Illinois
Theodore N. Rafferty, - Indiana
Robert G. Redd, - - Kentucky
William H. Rogers, - Indiana
Henly C. Rutter, - - - Ohio
John C. Sloan, - Pennsylvania
William G. Smith, - Indiana
N. W. Spring, - - - - Ohio
Oliver H. Saxton - - - Ohio
Beverly W. Sullivan, - Indiana
Edwin I. Thorn, - - - Ohio
William E. Tucker, - - - Ohio
Waddy Thompson, South Carolina
George F. Thomin, - - - Ohio
Will. W. Vinnedge, - - Indiana
Daniel Wilson, - - Indiana
J. Owen Wall, - - - Ohio
Jno. H. Williard, - - - Ohio
James M. Wood, - - - Indiana
Jonathan M. Wright, - - Ohio
Holmes T. Wilson, - - Ohio
Jeff. D. Young, - - - Ohio
Martin V. Young, - - Indiana

Internes appointed at the Hospitals:

CINCINNATI HOSPITAL.

S. W. Anderson, - - - Ohio
J. W. Dawson, - - - Ohio
J. L. Quinn, - - - - Ohio
J. B. Ritchy, - - - Ohio
H. Illoway, - - - - Ohio
W. W. Vinnedge - - - Indiana

GOOD SAMARITAN HOSPITAL.

W. Elijah de Courcy, - Kentucky
Henry C. Hutter, - - - Ohio
E. J. Galbraith, - - Indiana

AMERICAN MEDICAL ASSOCIATION, south-west corner Broad and Pine streets, Philadelphia. Wm. B. Atkinson, M. D., Permanent Secretary. The twelfth annual session will be held in New Orleans, Louisiana, May 4th, 1869, at 11 A. M. The following committees are expected to report:

On Diseases of the Cornea, Dr. J. S. Hildreth, Illinois, chairman.

On cultivation of the Chinchona tree, Dr. Lemuel J. Deal, Pennsylvania, chairman.

On Excision of Joints for Injuries, Dr. J. B. Reed, Georgia, chairman.

On Alcohol, and its Relation to Medicine, Dr. John Bell, Pennsylvania, chairman.

On the Cryptogamic Origin of Disease, with Special Reference to Recent Microscopic Investigations on that subject, Dr. Edward Curtis, U. S. A., chairman.

On Operations for Hare-Lip, Dr. A. Hammer, Missouri, chairman.

On Clinical Thermometery in Diphtheria, Dr. Joseph G. Richardson, New York, chairman.

On Inebriate Asylums, Dr. C. H. Nichols, D. C., chairman.

On the Influence of the Pneumogastric Nerve on Spasmodic and Rythmical Movements of the Lungs, Dr. Thomas Antisell, D. C., chairman.

To Examine into the Present Plan of Organization and Management of the United States Marine Hospitals, Dr. D. W. Bliss, D. C., chairman.

On the Utilization of Sewerage, Dr. Stephen Smith, New York, chairman.

On the Influence of Quarantine in Preventing the Introduction of Disease into the ports of the United States, Dr. Elisha Harris, New York, chairman.

On Nurse Training Institutions, Dr. Samuel D. Gross, Pennsylvania, chairman.

On Commissioners to aid in Trials Involving Scientific Testimony, Dr. John Ordronaux, New York, chairman.

On Annual Medical Register, Dr. John H. Packard, Pennsylvania, chairman.

On Devising a Plan for the Relief of Widows and Orphans of Medical Men, Dr. John H. Griscom, New York, chairman.

On Veterinary Colleges, Dr. Thomas Antisell, D. C., chairman.

On Specialties in Medicine, and the Propriety of Specialists advertising, Dr. E. Lloyd Howard, Maryland, chairman.

On Library of American Medical Works, Dr. J. M. Toner, D. C., chairman.

On Vaccination, Dr. Henry A. Martin, Massachusetts, chairman.

On the Decomposition of Urea in Uræmic Poisoning, Dr. H. R. Noel, Maryland, chairman.

On the Best Method of Treatment for the Different Forms of Cleft Palate, Dr. J. R. Whitehead, New York, chairman.

On Rank of Medical Men in the Navy, Dr. N. S. Davis, Illinois, chairman.

On Medical Ethics, Dr. D. Francis Condie, Pennsylvania, chairman.

On American Medical Necrology, Dr. C. C. Cox, Maryland, chairman.

On Medical Education, Dr. J. C. Reeve, Ohio, chairman.

On Medical Literature, Dr. E. Warren, Maryland, chairman.

On Prize Essays, Dr. S. M. Bemiss, Louisiana, chairman.

On the Climatology and Epidemics of Maine, Dr. J. C. Weston; New Hampshire, Dr. P. A. Stackpole; Vermont, Dr. Henry Janes; Massachusetts, Dr. H. I. Bowditch; Rhode Island, Dr. C. W. Parsons; Connecticut, Dr. E. K. Hunt; New York, Dr. W. F. Thoms; New Jersey, Dr. Ezra M. Hunt; Pennsylvania, Dr. D. F. Condie; Maryland, Dr. O. S. Mahon; Georgia, Dr. Juriah Harris; Missouri, Dr. Geo. Engelman; Alabama, Dr. R. F. Michel; Texas, Dr. T. J. Heard; Illinois, Dr. R. C. Hamil; Indiana, Dr. J. F. Hibberd; District of Columbia, Dr. T. Antisell; Iowa, Dr. J. C. Hughes; Michigan, Dr. Abm. Sager; Ohio, Dr. T. L. Neal; California, Dr. F. W. Hatch; Tennessee, Dr. B. W. Avent; West Virginia, Dr. E. A. Hildreth; Minnesota, Dr. Samuel Wiley; Virginia, Dr. W. O. Owen; Delaware, Dr. L. B. Bush; Arkansas, G. W. Lawrence; Mississippi, Dr. —— Compton; Louisiana, Dr. L. T. Pimm.

Secretaries of all medical organizations are requested to forward lists of their delegates as soon as elected, to the Permanent Secretary.

Any respectable physician who may desire to attend, but can not do so as a delegate, may be made a *member by invitation*, upon the recommendation of the Committee of Arrangements.

W. B. Atkinson.

American Medical Association—Meeting at New Orleans, Tuesday, May 4th, 1869.

I am authorized by the Atlantic & Mississippi Steamship Company of St. Louis to say, that they will carry doctors and their ladies to attend the meeting of the Association, at the following rates, viz:

From St. Louis to New Orleans, each passenger,	$20.00
" Cairo " " " "	18.00
" Memphis " " " "	15.00
Returning,	
From New Orleans to Memphis, each passenger,	$15.00
" " " Cairo, " "	18.00
" " " St. Louis, " "	20.00

The Company start a first class steamer from St. Louis every forty eight hours, Sundays included, and the usual time from St. Louis to New Orleans, is about six days, and from Cairo to New Orleans, about four and a half days. Passengers can go on any of their boats at the above rates, which includes meals and state-rooms.

The steamer which will, however, take down the great body of the doctors wishing to travel by the river, will leave St. Louis at five o'clock P. M., on Wednesday, the 28th of April; Cairo on Thursday evening, after the arrival of the afternoon train on the Illinois Central Railroad; and Memphis on Friday evening, reaching New Orleans from Monday noon to Tuesday morning.

Parties arriving by railroad, to take this boat, at either St. Louis, Cairo, or Memphis, had better make their calculations to reach the point of embarkation, at least one train in advance of the time of the boat's departure. But, if any one should arrive at Cairo or Memphis too late for this boat, he will find one or more boats passing for New Orleans every day, at ordinary fare.

It was deemed best to make the arrangement for a definite fare each way, so that one can go either down or up, or both, as he may choose, by the river, and know in advance just what he will have to pay.

To avail himself of this boat, one may apply on board, making it known that he is on his way to attend the Association, or, perhaps, better write me a line as early as convenient, stating how many ladies, if any, will accompany him.

Good steamers also leave Louisville for New Orleans every two or three days, occupying from six to seven days in the passage down. If a considerable number of doctors should wish to take passage from Louisville, and would make application in a body to E. T. Sturgeon, Superintendent Louisville & New Orleans Packet Company, at Louisville, or the Captain of a Steamer, starting at the proper time, he would probably give them a liberal reduction from the ordinary fare, which varies from thirty to forty dollars, acccording to the style and accommodation of the boat.

From Cincinnati, no suitable boat can be taken through to New Orleans, but the Cincinnati & Louisville U. S. Mail Line, will take one going to the Association, from Cincinnati to Louisville, on one of their fine boats, and from thence to New Orleans by rail, for forty dollars, and return him on the same route to Cinciunati, free. Two Mail Boats leave Cincinnati every day at twelve M., and six o'clock P. M., except Sundays, one at twelve M. I am not advised as to what arrangements have been made with other railroads. JAMES F. HIBBERD, M. D., *Richmond, Ind.*

A SUBSCRIBER in Missouri presents the following interrogatories, and we shall be very grateful if some of our readers will respond to them; indeed we believe the *Journal* can be rendered especially interesting and instructive, by having a department devoted to the presentation of professional inquiries and answers to them:

"What is the pathology of dropsy setting in suddenly, in cases where persons have been constant drinkers for years? Is it necessary in such cases of dropsy, that some organic lesion of the heart should be first superinduced? Is dropsy affecting persons who have drunk say from five to ten years, ever curable? What is the most rational treatment in such cases? Having had a large experience in cases similar to the above named, and not finding any very satisfactory description of them in any work, I take the liberty of making the above inquiries."

AN INDIANA physician recently wrote us, protesting against that feature of the law, recently before the Indiana Legisiature, to regulate the practice of medicine and surgery, which permits a man, no matter how infamous a quack he may be, to continue his nefarious trade, if he has been engaged in it for at least ten years—thus recognizing long continuance in crime as a license.

We must frankly say that we have but little faith in any law being sustained in the courts, should the test be made, which interferes with those already engaged in practice. A right once even tacitly granted

by the State, and accepted and exercised, can not readily be withdrawn; or, in other words, an *ex post facto* law will not be upheld. And our hope for better qualified physicians is not in legislating for those who are already in the profession, but for those who are yet to enter it. But be this as it may, one thing is certain, as long as colleges are dependent upon students for support, a higher standard of qualifications for license or diplomas is not soon probable; and hence, the great step to be taken is, *divorce teaching from licensing*—let the men who examine and give degrees, have no connection whatever with medical colleges—be entirely independent of them. But we must defer other remarks upon this subject to a future number.

At a meeting of the Covington and Newport Medical Society, held at Covington, Kentucky, February 19th, 1869, at the residence of Dr. R. Pretlow, the death of Wm. Hays was announced, whereupon a committee consisting of Drs. T. N. Wise, Henderson and Jessup, was appointed to draft resolutions expressive of the sense of the Society in regard to the sad event. The committee reported the following:

Whereas, It has pleased Almighty God, in the wise dispensation of his Providence, to take from among us our friend and co-laborer, Dr. Wm. Hays, in the morning of his professional usefulness; therefore,

Resolved, That we proudly bear testimony to the calmness with which our friend met the rapid approach of the fell destroyer, death, and that we are beyond measure gratified in knowing that it found him all prepared.

Resolved, That we sincerely deplore the death of our friend, who had bound himself with strong cords to our hearts, by a most consistent professional deportment and his many manly virtues.

Resolved, That in the death of Dr. Hays, our profession has lost one of its brilliant ornaments, and society a most useful member.

Resolved, That the Medical Society offers to the bereaved family of Dr. Hays our warmest and most heartfelt sympathy.

Resolved, That a copy of these resolutions be published in the city papers and in the Cincinnati medical journals, the *Western Journal of Medicine*, the *Richmond and Louisville Medical Journal*, and that a copy also be sent to the family of the deceased.

On the 29th of March, just as the last form of the *Journal* was going to press, we received from the office of the *Richmond and Louisville Medical Journal*, the proof-sheets of two letters from Dr. Baldwin, of Montgomery, Alabama, President of the American Medical Association, and one from Dr. J. C. Nott, formerly of Mobile, now of New York, accompanied with the statement: "Dr. Baldwin desires the medical journals of the country to publish these letters in full, or give

an analysis of them in April." The correspondence came altogether too late, even if it were not too long, for publication; and we must be content with a brief reference to some of its salient features.

Dr. Baldwin, under date of March 2d, writes to Dr. Nott, urging his attendance at the approaching meeting of the Association, states that the great mass of southern physicians are in full sympathy with the Association, that the few who are dissatisfied ground their complaint upon the rejection of the Gardner resolutions in 1864; he then discusses these resolutions, as to the propriety of the action of the Association, &c., &c.; finally, promising a hospitable welcome to the delegates at New Orleans next May.

Dr. Nott replies briefly under date of March 9th, speaks of the kindness of the profession to him in New York, refers briefly to the Gardner resolutions, &c., and concludes thus: "My many old friends must throw aside all minor considerations and come forward in sustaining your efforts to maintain the true honor of the south, the dignity of the profession and the cause of humanity."

The third letter is to Dr. Gaillard. If Dr G., who lost an arm in the war, if Dr. Nott, who lost his two sons thus, and Dr. Baldwin, whose only son likewise perished in the strife, are foremost in the cultivation of amity and cordial friendship, not even the smallest fragment of the southern profession ought to feel or act otherwise.

Vaccine Agent of Western Virginia.—Dr. J. C. Hupp was appointed State Vaccine Agent a few days since by Governor Stevenson. Dr. Hupp, we believe, has filled this position since the formation of the State, and has given universal satisfaction.

Our Friend Dr. J. D. Jackson, of Kentucky, requests us to make the following announcement: All the railroads in Kentucky, the "Kentucky Central" excepted, have offered *half-fare* (full fare going, return free,) to delegates attending the "American Medical Association" at New Orleans, in May next. The "Louisville & Nashville & Memphis Railway," have very kindly effected an arrangement with the roads connecting with it south, by which through half-fare tickets to New Orleans can be obtained at Louisville.

Notwithstanding the addition of four pages to this number of the *Journal*, we still find ourselves compelled to defer several matters, bibliographic, items of news, editorial notices, *et cet.*, until our next issue.